



# Annual Report

... of the ...

Public Health Department  
and various Sub-Departments  
of the City of Edinburgh

## For the Year 1919

... By ...

A. Maxwell Williamson, M.D., B.Sc.,  
Medical Officer of Health



PRINTED BY  
H. & J. PILLANS & WILSON, 86 HANOVER STREET



*With*

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*Compliments.*

# ANNUAL REPORT

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Public Health Department

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PUBLIC HEALTH DEPARTMENT,  
CITY CHAMBERS,  
EDINBURGH, *October 1920.*

MY LORD PROVOST AND GENTLEMEN,

I have the honour to submit my Annual Report on the health of the City and its public health administration during the year 1919.

For the past few years it has been necessary, owing to prevailing conditions, to limit the Report to a few short annual tables of statistics, but it now becomes possible, in obedience to the requirements of the Scottish Board of Health, to elaborate these and to issue the Report in the form adopted up to five years ago.

During the year the number of deaths which have occurred within the City boundaries has been 5583, which is equal to a death-rate of 16·5 per 1000. This, indeed, is the most important figure which appears throughout the whole body of a Medical Officer's Report, as it includes the deaths which have occurred from all possible causes, and from a knowledge of which can be deduced a definite opinion regarding the efficacy of the various health measures which have been adopted during the year. It is also possible, in possession of such information, to compare progress, or otherwise, from year to year, and to deduce at least some information as to the value of health administration and general conditions pertaining to health, in one district as compared with others.

General  
Death-Rate.

A knowledge of a general death-rate also throws much light upon the conditions detrimental to health which prevail in different districts of the locality to which such rate refers, and enables a Health Authority to direct attention to those particular portions of its district where a death-rate higher than the average is found to prevail.

This practical possibility in the use of statistics is of the greatest importance, and it is an extraordinary fact that in compiling Annual Reports it is found with unvarying regularity that, year by year, the same districts in an urban area maintain their relative positions above or below the mean average rate. This interesting fact most certainly applies to this City, and it has been necessary for me year after year in a very considerable number of Reports to refer to the fact, with some practical deductions which were rendered possible through a knowledge of it.

In the present Report some excellent illustrations of this truth may be found by glancing at several Charts, which might be technically termed "Line Charts." These are found on pages 6, 17, 33, and 35.

From these it appears evident that there are certain Wards within the City which, with unvarying regularity, occupy the unenviable position of being considerably above the mean average line, and that this position is applicable, not only to general death-rates, but to all other causes of fatal disease. Thus it is possible to construct a Line Chart showing excessive Phthisis Mortality in practically the same Wards as another Line Chart applicable to Infantile Mortality, to Mortality under five years of age, to Zymotic Diseases, or to general death-rate.

This makes it possible to assert that in this City, and indeed in all large centres of population, there are Wards to which I have previously referred as "black spots," where death-rates are so much in excess of the average as to render the conditions prevalent in them subject matter for very serious consideration.

Thus St Giles' Ward shows a general death-rate of 19·4; George Square Ward, 18·2; and St Leonard's, 17·8—all of which stand out in bold relief in marked excess over the general average of 16·5.

This applies also to infantile mortality rates, where St Giles shows 150 deaths per 1000 births, and St Leonard's 160, as compared with the average for the whole City of 117 per 1000.

The Death-rate and Housing Conditions.

Of course these conditions circle around the whole question of Housing. In the presence of insanitary, overcrowded districts there is, and will always remain so long as the conditions remain, a sickness rate and a death-rate greatly in excess of the mean average. Indeed, where these conditions are present, there seems no ground to hope for any reduction in the present death-rates below the extremely satisfactory standard to which within recent years it has been possible to attain through the adoption and application of the latest and best scientific preventive measures.

It is marvellous, in taking a retrospective view of death statistics, to observe how wonderful has been the progress in effecting a reduction in these rates. Thus, in 1871 the general death-rate was 28 per 1000, and the rate circled round about that figure for a few subsequent years, when it began to yield to the forces of preventive measures adopted, until during the past few years the figure has fallen to between 14 and 16 per 1000, the rate during the term under report having been 16·5 per 1000.

I feel that the probability of a reduction much below this figure is not a great one until the chief causes which militate towards high death-rates, viz., insanitary housing conditions, are dealt with in the most heroic fashion and satisfactorily removed. A knowledge of figures, then, leads clearly to a knowledge of prevailing conditions, and to the localities in which such prevail. There only remains



to be made, in order to ensure a successful issue, a determined and systematic effort to remove the cause, with a certain consequent result of improved health conditions and lower death-rates.

Edinburgh's general death-rate during the year compares favourably with that applicable to other large centres of population during the same period. Some cities have been very markedly in excess, while others, of course, have shown better results. In explanation of this it must be remembered that during the early part of 1919 the City was visited by the very serious outbreak of Influenza. The Influenza Outbreak.

The epidemic reached its highest point during the months of January and February. In the latter month, one of the weekly death returns actually showed a death-rate equal to 48·1 per 1000, and the total number of deaths during the year attributable to that appalling outbreak reached the very high figure of 744. This, be it said, added materially to the rate over the whole year; indeed, it increased the rate in round figures by 2 per 1000.

Every conceivable effort was adopted in order to diminish the ravages of this outbreak. The details of it, which are generally well known, need hardly be repeated. So serious, however, were the conditions present that whole households fell victims to it, and it was no uncommon thing for several burials to take place from the same house at one time.

The energies of the Public Health Department were certainly taxed to their extreme limit during that period, and so serious did matters become that it was found necessary, in the interests of the health of the community, to close the schools upon two separate occasions, and to limit the hours during which certain classes of public entertainment were permitted to be carried on. The urgency of the whole situation, indeed, necessitated the adoption of every possible method that could suggest itself as likely to contribute towards a diminution of the very appalling state of matters. During the most aggravated period of the outbreak, the resources of Colinton Mains Hospital were so taxed as to render it only possible to admit the most urgent cases, and the death-rate of those removed to that institution was a very enormous one indeed. In all, 340 cases were admitted, and of these 86 proved fatal.

Over 5000 cases of all forms of infectious disease were treated in Colinton Mains Hospital during the year. These included all Leith cases, which otherwise would have been removed to their own hospital at Pilton, as well as a very considerable number of military cases removed from the various hospitals and camps, and naval cases removed from Queensferry. Popularity of Hospital Treatment.

This enormous figure indicates the extent to which the public appreciate the advantages of hospital treatment in comparison with the position of matters in former years, and it is difficult to realise the benefits which have resulted from such a free use of the institution, not only as an important means towards the prevention of the spread of infectious disease in their houses, but also as an invaluable method of enjoying the best possible available treatment, and also of ridding themselves and their households of the cares and anxieties connected with sick-nursing.

Some figures will indicate the extent to which the appreciation of the resources offered to the public are now being taken advantage of.

Thus so comparatively recently as in 1890 only 29 per cent. of cases of Diphtheria in the City were removed to hospital; now in the year under report 97 per cent. were treated in that institution.

Some years ago there seemed to be a hesitancy on the part of many citizens in allowing their children and friends to be removed to hospital while suffering from Scarlet Fever, and in the year 1890 only 40 per cent. of the cases occurring in the City were so removed. Last year the percentage had actually reached 98 per cent. of the total cases.

This fact may perhaps be stated in a more convincing manner. While 1459 cases of Scarlet Fever were notified in the City, no fewer than 1435 of these were treated in the City Hospital.

The large financial cost entailed in the carrying out of public health administration is sometimes a matter for criticism. When the innumerable advantages enjoyed by the public in return for such are borne in mind, it ought to be readily and generally admitted that probably no expenditure is attended with more real and immediate return.

The advantages offered at our magnificent hospital, and the extent to which these are taken advantage of, forms only one of the innumerable items which justify, and more than justify, all the costs entailed, and in which all citizens, either directly or indirectly, reap some substantial benefit.

Typhoid Fever in the City may safely be looked upon as being one of these forms of disease which has been successfully conquered. There cannot possibly be any more convincing argument in favour of the tremendous advances which have been made in public health during the past few years than is shown by the history of this particular disease.

In former years Typhoid or Enteric Fever was practically endemic or constantly present throughout the City generally. At times it assumed an epidemic form, and there have been periods when these epidemics have been of a most virulent and serious nature.

Forty years ago the average number of notifications in the year was over 400, and there were times when the number of cases assumed such proportions as to strain to its utmost all of the available hospital bed accommodation in these days.

With the passing of years there has been a gradual and certain diminution in the number of cases, until during the past few years there has ceased to be any real anxiety to the Public Health Department here in regard to this particular form of disease. It is now possible to report that during the year under review there is, for the first time on record, not one single death from Typhoid Fever among Edinburgh citizens. A very few cases have been sent into hospital from naval and military centres, but in our own City there has been an absolute immunity of death from what was formerly so common and serious a form of infectious disease.

734 cases of Diphtheria were notified during the year, and of these 82 proved fatal.

Diphtheria and  
the Anti-toxin  
Treatment.

As is well known, a tremendous advance was made in the treatment of this particular form of disease by the advent of the anti-toxin treatment some years ago. In order that the full benefits may be obtained, it has always been recognised that the earlier the application of treatment, the greater is the possibility of a successful issue.

The Medical Superintendent of Colinton Mains Hospital has published some most convincing data in regard to this matter.

Thus he finds that where cases are admitted to hospital for treatment within two days the mortality is only 4·2 per cent. ; within three or four days of the commencement of the illness the mortality is 8·3 per cent. ; within five or six days the mortality is 15·4 per cent. ; while on or after the seventh day the condition becomes so serious as to be succeeded by fatal issues in no fewer than 18·5 per cent. This, of course, conclusively proves the extreme importance of constant observation on the part of parents or friends, and of the necessity of immediately calling in medical aid.

In order to facilitate the immediate application of the anti-toxin treatment by general practitioners, there has been for some time a method in force in the City under which there is a quantity of this material stocked in certain shops in each district, so that there may be no loss of time after the arrival of the practitioner and after the diagnosis has been completed. It is found generally, however, that practitioners prefer, in full recognition of the well-known facts referred to, to immediately have their patients sent to hospital and subjected to treatment there, and for that reason it is found that the demand at the various centres for the free supply of anti-toxin is not a great one.



The present-day possibilities of extremely rapid removal of a patient by means of motor ambulance ensures that no delay occurs after a notification has been passed on to the Public Health Department, with the result that it is possible to have a patient under active treatment within less than an hour or so of notification having been received.

Keeping in view the extreme importance of speed in this relation, it becomes extremely interesting to compare the proportion of cases of this disease which were removed to hospital thirty years ago with those similarly treated to-day. Thus, in 1890, only 29 per cent. of those occurring in the City were removed to hospital. That number gradually and constantly rose until actually during the year 1919 no fewer than 97·5 per cent. of all the cases occurring throughout the City were treated in our hospital at Colinton Mains. It will thus be recognised that every possible step in the interests of the patient, and tending towards his ultimate cure, is adopted by the Public Health Authorities; but it is well that the public should recognise the facts which have been stated in connection with the vital importance of early notification, and the serious possibilities which at all times exist in connection with what is too often casually regarded as an ordinary sore throat. It is by taking precautions in connection with the very earliest indications of infectious disease, and perhaps very particularly this form of it, that the friends of patients can not only aid the Public Health Authorities in dealing with outbreaks, but enable them to render the very best possible service in connection with individual cases as they occur.

Treatment of  
Tuberculosis.

Tubercular disease yields slowly to the very far-reaching efforts which are being made in this City towards effectively dealing with it.

The actual number of cases notified has been slightly below that which occurred during the previous year, and in point of fact registers the lowest figure yet attained. There were, however, 602 cases of Pulmonary Tuberculosis notified, in addition to the very considerable number of notifications of tuberculous disease affecting other organs than the lungs.

The Sanatorium at Colinton Mains; Royal Victoria Hospital at Comely Bank; and Polton Farm Colony continue to receive for treatment a very large proportion of the notified cases. Indeed, of the 602 notified cases, no fewer than 359 were treated in these various institutions. That alone forms a splendid record of work, including as it does a large number of patients whose condition has been detected at its very inception, and including also the various stages of the disease up to many of the most advanced and most infectious types of it.

It is, of course, an axiom, as in the case of Diphtheria which has been referred to, that the earlier the treatment the greater is the possibility of successful response to it,

and it is a constant complaint on the part of clinicians that cases, which in presence of early treatment would have been easily brought to a satisfactory cure, have had their successful treatment impaired, if indeed not rendered impossible, through delay and early neglect of suspicious symptoms.

However, the record of the year's work must be regarded as tending towards an ultimate successful issue. Early cases in many instances have been markedly improved, or cured, while many of the more advanced have been considerably relieved. There remained, however, a large proportion of extremely advanced cases which eventually proved fatal while under treatment in hospital, but in regard to even these it must be borne in mind that they have, during the latter time of their ailment, experienced all the advantages and comforts which are possible in a well-appointed sanatorium, and their friends have been relieved of the anxieties and risks which are inseparable from attendance on a sufferer from this disease in an advanced form, and during, what frequently is the case, a very considerably prolonged period.

The magnificent work carried out at the Royal Victoria Dispensary possibly holds out more hope in connection with the general crusade against Tuberculosis than is contributed by other departments of the work. Dr Guy, Tuberculosis Officer, and the medical assistants there, are constantly engaged in critically examining the condition of all, including generally young persons, in whom any evidence of the disease may be lurking, with the object of detecting it and commencing cure at the very earliest period of its inception. This constant quest, then, after early cases of the disease holds out a greater hope of ultimate success than is likely to be attained through sanatorium treatment where the disease has got beyond even the earliest stage.

Reference has once or twice been made to the Line Charts which appear in the body of this Report, and it has been indicated that death-rates from all forms of disease run to excess and are found considerably above the mean average in certain specific Wards of the City.

In connection with Tuberculous disease this rule certainly holds good, and reference to the Line Chart included in the Report will show convincingly the particular Wards where insanitary conditions exist, and there invariably Phthisis, in common with other forms of infectious disease, is found present in very excessive numbers. This fact, of course, renders it necessary for me to repeat, as I have done upon so many occasions, that the real hope of ultimate success in overcoming this fell disease rests not in the multiplying of sanatoria, or even tuberculosis dispensaries, but is centred in the accession of a supply of suitable and sanitary housing accommodation. Much of the expense at present laid out on the provision of the institutions for the cure of Phthisis might well be diverted towards the object of prevention rather than by

lavishing expenditure on efforts to cure, which, it must be admitted, yield returns which are not encouraging and cannot be regarded as commensurate with the financial outlay involved.

There remains, however, undoubtedly much to be said in favour of the remarks made by Dr Guy, Tuberculosis Officer, in his report which accompanies the present issue. Sanatoria *do* relieve the anxieties of the friends and patients and *do* remove foci of infection from small crowded dwelling-houses, and to these extents they have their use, but when they fall to be regarded in the light of curative institutions, it is then that a real difference of opinion exists among Public Health and Municipal Authorities.

Measles.

This disease of childhood is more to be feared than any other form of infectious disease, but popularly it is regarded as of comparatively small importance. For many years I have desired to have a larger available hospital accommodation for the treatment of it, and have referred to the importance of the subject in several previous Annual Reports.

The ever-increasing demand for hospital accommodation, owing to the greater confidence shown by the public, to which reference has just been made, has rather interfered with the removal of as many cases of this disease as I should have desired to do.

The Board of Health are now directing attention to the importance of this matter, and fortunately at the same time there will be new opportunity under prospective amalgamation reorganisation to set apart some more beds for the treatment of this disease. This step is of very urgent importance indeed in dealing effectively with infectious disease, particularly in infancy and early childhood.

The somewhat restricted accommodation has, however, been utilised to its very fullest extent. The most serious cases, and those most urgently requiring removal on account of their surroundings, were regarded as the ones which had the first claim upon the available accommodation.

It has therefore been the custom here to remove any urgent case occurring among the youngest children in whom the fatality is greatest, and also to remove to hospital cases where their surroundings were such as to involve risk of infection to those resident in the same house.

This basis of selection has proved very valuable indeed, and such will be observed in the future until the greater amount of available accommodation, so soon to be at



the Department's disposal, will still further relieve any tension that may have at times been found to exist.

Limited though the accommodation has been, it has still been possible to remove to hospital during the year no fewer than 500 cases of Measles, and the judicious selection of these may be gathered from the fact that in nearly 40 per cent. were the cases accompanied or followed by complications of a more or less serious nature.

The total hospital mortality rate of this disease was 10·1 per cent. When this rate is contrasted with the similar rate applicable to Scarlet Fever, which during the year was 2·4 per cent., it may appear evident to how much greater an extent is this disease to be feared among children, particularly those of a very early age, and how dangerous is the popular opinion in regard to the triviality of this particular type of fever.

Cases of Whooping Cough have also during the year been selected as suitable for hospital treatment largely upon the same basis as has been described in connection with Measles. Whooping Cough.

This disease is of an urgently fatal nature, particularly among the youngest children, and so great indeed is its fatality as to very substantially raise an annual infantile mortality rate during any year in which it has been epidemic. Fortunately, these epidemics, although occurring at fairly short intervals, do not recur each year. During the year under report, however, there was rather an excess in the average number of cases, and no fewer than 193 deaths occurred.

The disease is always extremely fatal among young infants, and there were no fewer than 71 of these under one year of age who fell victims to it.

Here again it may be urged that far too little importance is, as a general rule, attached by parents to the presence of this disease in their family, and there certainly exists a considerable amount of carelessness on the part of many in exposing children, so suffering, in public places, to the extreme danger of other children with whom they may come in contact. It is an extremely common experience to find mothers in charge of infants suffering severely from Whooping Cough, occupying seats in tramway cars and other places of public resort, and when it is borne in mind that the hospital death-rate of this disease amounted during the year to 30·7 per cent., the gravity of the position and the danger incurred to others by undue and careless exposure should be recognised by those who have the care and responsibility of children suffering from it.

The infantile mortality rate during the last year has been 117 per 1000. That, unfortunately, indicates an exception to the experience of many past years, which have almost invariably indicated a slow but sure reduction in the rate of mortality in response to the many branches of work which are now being so urgently carried out with the view of diminishing deaths among children, and very specially among young infants under one year of age.

The presence of an outbreak of Whooping Cough during the year to some extent at least accounts for the slight increase beyond what would otherwise have been the case, but there are other elements which occur from year to year which indicate that, in appraising an infantile death-rate and in deducing conclusions from it, a much more certain basis on which to found such deductions is by taking an average rate over a limited number of years. According to that method exceptional fallacies, peculiar to a specific year, are omitted, and it is possible to arrive at a conclusion in regard to the question of real progress or otherwise in connection with efforts to reduce these mortality rates.

Perhaps an average period of ten years is a safe one to follow in this connection, and if that plan be adopted here, there falls to be recorded a very great advance indeed in the efforts that this Corporation is making towards the reduction of deaths in the early years of childhood.

Thus in the decennial period from 1890 to 1899 the average mortality rate was 143 per 1000 births. In the following decennial period it had fallen to 122 per 1000 births, while from 1910 to 1919 the average mortality rate had fallen to 110 per 1000. These figures imply an enormous saving of infant life, and it cannot be doubted that the very many steps which have recently been taken by the Corporation must be reflected in ever-increasing progress in the future.

It should be borne in mind in this connection that the real value of the various institutions established under the Child Welfare Scheme cannot be judged by the present infantile mortality rate. The matter must rather be regarded in its wider aspect. This, of course, includes the undoubted benefits which are now being conferred upon young children who are getting the advantages of the scheme, as well as from the point of view of the future of these children, who will certainly bear the impress of these benefits in after life.

There cannot be any doubt whatever that the younger generation, from the point of view of public health alone, are having advantages bestowed upon them which were unthought of a few years ago, and which must necessarily remain

to their benefit in future years, and will equally certainly go far towards saving much of the future expenditure which necessarily falls on a Corporation in presence of a large proportion of weakly and sickly citizens.

It is not unreasonable to suppose that hospital expenses alone ought to diminish with the passage of years in consequence of the care of young life, which is doubtless now entailing a cost which, in the opinion of some apparently, is not commensurate with the present value obtained.

There are one or two matters, however, that claim some attention in connection with this subject.

The first of these has reference to the enormous death-rate which occurs among illegitimacy. illegitimate children. Of these there were 572, or 10·2 per cent. of the total births during the year.

The fate of great numbers of these unfortunate infants is such as year after year to add very materially indeed to our infantile mortality rates. A study of the disproportionate rate of deaths among these children compared with others is of itself sufficient to prove that there remains room for the greatest possible suspicion that the infants die because their presence is in many instances an inconvenience, and they have not enjoyed a fraction of the chance to live which is bestowed upon the children born under more favourable conditions.

Nothing could be more convincing than to regard the statistics under this heading applicable to the last three years in this City.

In comparing the deaths of legitimate infants under one year with those who are illegitimate, it is found that in the year 1917, 113 of the former died, compared with 212 of the latter. In the following year, while 79 of the former died, no fewer than 198 of the latter fell victims; and during the year under report, while there were 105 deaths among the legitimate infants under one year of age, there were no fewer than 211 illegitimate.

Such proportions may be taken as ruling year after year, and it may therefore be regarded as the rule that in these proportions the infantile death-rate, already so high, is constantly subject to a very serious increase.

Several factors, of course, contribute towards the infantile death-rate, either legitimate or illegitimate.

In the first place, many infants early fall victims to unhealthy surroundings, and therefore the high rates which have been referred to as existing in densely populated Wards in the City are found here also in the same Wards, and are shown by the same method of Line Chart as has been used to illustrate other death-rates.



In the second place, there cannot, in my opinion, be any doubt that young children, and particularly infants, suffer severely, and to an ever-increasing extent, by what appears to be a habit, very much on the increase, whereby mothers expose these infants of tender age to the inclemency of the weather at late hours at night, and very specially in places of entertainment, particularly picture houses.

It is a perfectly common experience to find in the poorer class of picture house great numbers of women who, night after night, are accompanied by an infant in arms. There can be no two opinions about the serious danger entailed to the life of the infant, and I am very strongly indeed of opinion that with the object of conserving child life, the time has now come when in their interest some regulations should exist to render this impossible. It is surely a contradiction for Local Authorities to be required to spend large sums of money for the benefit of infant and child life, and to remain witnesses of conditions in practice, than which there could not be conceived anything more detrimental to the health of an infant or to the chance of its surviving its most critical period of life.

There is another matter, however, which refers specially to the illegitimate infant. There cannot be a doubt that the practice of handing over a child, along with a premium, to an unknown adopter appears to be considerably on the increase. This practice is no doubt familiar to the ordinary outside public. Its familiarity, unfortunately, is due to the constantly recurring advertisements which are inserted in papers suggesting such transactions. The phraseology adopted varies, but the suggestion is made that the child is to be adopted with a premium, and with no further inquiry or responsibility.

This condition of matters is fraught with the very greatest possible danger in the interest of the child, and the disproportionate death-rate of illegitimate infants, to which reference has been made, may throw some light upon the extent of the disproportion.

Of course, there already exists law under which every adopter of a child must furnish detailed information to the Parish Authorities, who do all in their power by visiting the mother and the home, and exercise supervision over the conditions under which the child is kept.

In spite of that, however, the fact remains that on the very surface the custom so prevalent, and increasingly prevalent, is attended by most unfortunate possibilities.



It is not at all an uncommon experience in connection with the work of this Department to find that application is made for the burial of an illegitimate infant by the person who has adopted it.

Inquiry reveals the fact that a sum of money was paid to the applicant at the time of adoption; that this has been squandered; that the child has been under her care for the shortest possible period when its death occurred, and then it became necessary to make application to the Local Authority to supply sufficient to meet the funeral expenses.

In most of these cases the applicant professes herself in total ignorance of the name and address of the infant's mother or the place where she resides. The child in life has literally been given away with a premium to a person of whom the mother knew nothing and cared as little.

The question of how to remedy such a condition of affairs is, of course, a much more difficult one. It seems, however, certain that the present state of matters in the interests of young illegitimate infants is absolutely unsatisfactory.

The increase in that number tends, of course, to more definitely direct attention to the state of matters as they at present exist, and it ought to be succeeded by some serious consideration as to a method by which the difficulty may be satisfactorily met and overcome.

One suggestion that always prominently presents itself to me as a result of experience is that no person who is obviously unable to provide for an additional member of the household ought, under any circumstances whatever, to be permitted to incur the added responsibility of an adoption, and, be it said, if this rule were enforced a very considerable number of persons who at present adopt infants would be prevented from doing so.

The question of establishing homes for these unfortunates could be argued from both points of view, and it is difficult indeed to give a decision in regard to the proper course.

Adoption under proper circumstances, and when entrusted to absolutely trustworthy, responsible citizens, would of itself, if insisted upon, bring about some very considerable improvement on the state of affairs as they at present exist.

In accordance with the requirements of the Scottish Board of Health a Scheme was prepared for the purpose of ensuring, free of cost and under conditions of the greatest possible secrecy, treatment to all sufferers from every form of Venereal Disease.

Venereal  
Diseases.

After the adjustment of preliminary arrangements with the Managers of the Royal Infirmary the Scheme was inaugurated on the 1st of March 1919, under the able supervision of Dr Lees, along with a Female Clinical Assistant, Dr M. Liston, whose duty was generally to be directed towards attendance on female sufferers.

One of the first steps which was taken towards dealing with these maladies in a thoroughly efficient manner was to adopt such measures as would ensure an immediate and entire suppression of all unqualified or "quack" practice in connection with the treatment of this class of disease. The existence of such, as is well known, entailed the greatest possible danger to sufferers, retarded recovery in most cases, and in innumerable instances led to aggravations and complications of the disease in their worst possible form. To remove all possibilities in this direction, then, became a first essential in adopting efficient methods and in offering satisfactory treatment to the public generally.

In order that this might be accomplished an application was made to the Board of Health, who promptly issued an Order rendering it an offence of a serious nature for any unqualified practitioner to prescribe for any of the diseases contained in the general term "Venereal."

After the passing of the Order the aid of the Police was invoked, with the result that one conviction of contravention was effected in the City, and this was speedily followed by an absence of any subsequent complaint.

After the removal of this obstacle, then, it was possible for Dr Lees and his Staff to commence their work in earnest. It must be here remarked that this branch of Public Health service has been carried out since then with an enthusiasm and success reflecting the greatest credit upon all concerned.

Before the commencement of the Scheme there existed some little difficulty in regard to the actual extent of the prevalence of these diseases. No statistics of a reliable and sufficiently exhaustive nature were obtainable, and it was impossible to forecast the extent to which sufferers would be likely to avail themselves of the opportunities for treatment which were thereby afforded them.

All doubts were speedily set at rest from the very commencement of the practical working of the Scheme, and before many days had passed sufficient information was available to indicate the extraordinary number of sufferers from this disease, and also, fortunately, to set at rest any fear as to any disinclination on the part of such to place themselves immediately under treatment.

The resources, then, of Dr Lees and his Staff at the daily clinics at the Infirmary Centre were rapidly taxed to their utmost, and so great has been the increasing

response as to render it necessary upon several occasions to reconsider the original provision made ; to add to the resources available ; and to make important changes in the accommodation, as well as additions to the number of the staff.

It must be borne in mind that Edinburgh, on account of the reputation of its medical school, attracts sufferers from distances very far beyond its boundaries, and in this particular case there has been quite an influx of diseased persons seeking relief at the Edinburgh Infirmary, and who have travelled practically from all the outlying districts of Scotland, and in many instances from England and abroad.

During the period from 1st March to 31st December no fewer than 1656 male patients were under treatment in the Infirmary. Of these 665 are classified as from the country, implying as that does, districts far and near, beyond the City itself. In addition there were treated 461 females, including 147 from districts outwith the City. This makes the somewhat extraordinary total of considerably over 2000 patients who received attention during the first ten months of the operations of this Scheme.

Of course the essential of treatment implies that each sufferer requires to return to the clinics as frequently as the condition indicates, and it is therefore no uncommon thing for the Clinical Medical Officer to find himself face to face with the treatment of between 200 and 300 cases in one day.

These facts and figures, regarded from one point of view, are eminently satisfactory. They indicate the extreme need for the Corporation having regarded this work as an important piece of duty in connection with public health administration, and they also show the extent to which sufferers are prepared to take advantage of the facilities offered them. From another point of view, however, there remains the extremely disquieting information which has been gathered from the operations of the working of this Scheme as to the extraordinary extent to which this fell disease exists throughout the community.

Its dangers need not be enlarged upon. The extent to which it incapacitates men, women, and children is known only to those who have an inside knowledge of the reality of things. The alarming extent to which, through its various manifestations, it adds to the death-rates at all ages ; its effect on women sufferers, with a subsequently appalling effect on the birth-rate and infantile mortality rate, particularly in the early months of life, amount to such a total of disease and misery as to render it a duty absolutely incumbent on all concerned with the welfare of the nation, and specially on those charged with public health oversight, to see to it that every step is taken which may tend in any way to mitigate these evils.



In this connection, too, it may be claimed that within large limits any financial outlay that is necessary in order to cure the sufferers should be willingly incurred in their own interest and in that of the common weal.

While all of this is so, there is an aspect of the question which must claim attention now or in the near future.

The whole scheme lays claim to being nothing else than a curative one. Local Authorities have been required to make preparations in some cases, as in Edinburgh, on a very large scale, but the decision of taking advantage of these facilities is left ultimately to the sufferer.

There is no notification of the disease, and no law exists under which any compulsion under any circumstances whatever, may be brought to bear upon any case, however aggravated. There are, of course, very obvious objections to the disease being made in the ordinary sense a notifiable one—the common argument against such a step being that it would certainly lead towards concealment of the disease, which is most to be feared in connection with any attempt towards cure.

On the other hand, there remains the question, and a very serious one, as to whether or not there should be some modified form of notification or some modified compulsory powers vested in the hands of the Public Health Authorities. It surely is anomalous that persons who may be suffering from Venereal Disease in an acutely communicable form, and who are known to the Public Health Authorities as actual sources of the spread of it in great numbers of cases, should be allowed to proceed on their evil courses without any power being vested in any authority to deal with them in such a way as would be in their best interest, and certainly would safeguard others who are falling victims before them.

The continuation of a treatment centre without any accompanying compulsion represents simply the revolution of an endless chain. New supplies of material for treatment will be continually forthcoming so long as the sources are left undetected and untreated.

It does seem strange that in regard to this most terribly fatal disease there exist no compulsory powers, while in regard to the less virulent forms of infectious disease, such as Scarlet Fever or Diphtheria, there are vested powers in the Medical Officer of Health which enable him to take immediate steps for the protection of others.

It is not suggested meantime that the disease should be a notifiable one—the objections to that being perfectly self-evident. This would probably be against the best interests of all, and would probably have the effect of rendering futile the best efforts of the Health Authorities. It may be suggested, however, and that with some

very considerable degree of force, that persons suffering from communicable disease, who are known to the authorities and fail to take advantage of the treatment offered, should be subject to some form of compulsion; and further, that those who for a time submit themselves for treatment, and, as is so frequently the case, fail to continue attendance at the clinics until cure is perfectly effected, should be similarly liable to some form of compulsion until a cure is completed.

It is along these lines, then, that some lasting good may be expected to result, under which it would be possible to look forward to some diminution in the extent of this disease which seems impossible under the present conditions.

The various references throughout this Report to the existence of ever-recurring high death-rates from all causes in certain Wards of the City render it necessary to refer to the conditions of housing, overcrowding, and general sanitation, particularly in these areas, in order to establish the connection which quite apparently exists in the relationship of cause and effect. Housing.

Once again reference might be made to the various Line Charts set forth in this Report, and very specially to those particular Wards in which almost invariably death-rates above the mean are found to stand out prominently. These, in point of fact, are the Wards where the existing housing conditions are most clamant.

The Report of the Housing Commission issued some time ago laid down certain standards which should be adopted in order to bring about the necessary improvement in housing conditions. With these in view I had a careful survey of the City made, and have reported to your Council the results obtained.

I find that throughout the City there exists a minimum of 3000 houses, which, in my view, are in such a condition as would have led to their condemnation had existing circumstances been such as to justify this course.

These, indeed, are the houses which, in ordinary routine practice, would have fallen to be dealt with by an open Court of your Public Health Committee, and most, if not all, of them would certainly have been closed as unfit for habitation. The work of that Court has necessarily been in abeyance for some considerable time, and the conditions which otherwise it would have been called upon to deal with, tend, of course, to become more aggravated with the passage of time.

In addition to these houses, I have found it necessary to report to your Council certain areas which, in my opinion, require to be dealt with in a somewhat heroic manner, and which, in point of fact, should form suitable districts for the carrying out of Improvement Schemes on a somewhat large scale.

The number of houses involved in these areas is close upon 2000, and when this number is added to the uninhabitable houses previously referred to, it may be gathered that some 5000 houses in the City at present are, from a health point of view, somewhat urgently in need of attention. Of course, obviously, it is impossible to act in regard to these matters as all would desire to do, in the absence of such available accommodation as would provide for the needs of those who would be dishoused.

These areas include the following districts, in each of which there is detailed the special number of houses involved, and it will be noted that the greatest number of these are situated in the Wards in which greatest overcrowding exists, and where almost invariably the highest death-rates prevail.

Area.	Houses.
(1) St Mary Street, Cowgate and Closes . . . . .	605
(2) East Fountainbridge, High Riggs, etc. . . . .	122
(3) East Crosscauseway, Cowan's Close, Simon Square . . . . .	294
(4) India Place, Church Street, Saunders Street . . . . .	235
(5) South Gray's Close, Fountain Close, and Tweeddale Court . . . . .	88
(6) Canongate and Closes . . . . .	47
(7) New Broughton . . . . .	71
(8) St Leonard's District (Pleasance, Oakfield Court, Arthur Street, etc.) . . . . .	356
(9) St Leonard's—Richmond Streets and part of Pleasance . . . . .	148
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	1966

At the present rate of progress the prospect of carrying out these Improvement Schemes in the near future does not appear to be a particularly bright one. Even in full realisation of the progress being made by the Corporation in the provision of new houses and the prospects of reconstruction of 700 or 800 existing ones, there does not appear to be within the scope of that provision any prospect of accommodation for those who would require to be dishoused in order that the desired Improvement Schemes might be carried into effect at an early date. Indeed, the number of people living under insanitary conditions at present far exceeds the proposed housing accommodation already arranged for, however generous that may be, and I remain of the opinion that for the purposes of removing the most insanitary of the dwellings and of permitting needed Improvement Schemes to be carried into effect, some provision might be made in the early and rapid erection of some block houses on some of the sites which could be readily selected as suitable for that purpose.

Block houses may not be ideal, but with all the criticisms to which they may be subjected they are found to withstand these remarkably well in cities where they exist, and from a health and comfort point of view are immeasurably beyond the conditions under which so many citizens are at present living in the worst districts of this City.



The Corporation arrangements, under which it is intended to build some 3000 houses, appear to be satisfactorily under way, but obviously considerable time must elapse before these are completed. There remains, however, the great probability that the demand for them as completed will be so great on the part of altogether new applicants as to negative the hope of their being available for the present occupants of condemnable property.

In any case very much of that property will certainly have fallen into a seriously insanitary condition before the new houses are completed, even if that be within the maximum period anticipated.

Of course it is to be borne in mind that the Corporation, in addition to their building arrangements, have also in view definite plans for reconstruction of a number of houses which no doubt fall within the category of those previously referred to. The number for which such arrangements have been made is over 700. This, however, falls so far short of the necessities of the case as to raise the question whether it might not be advisable to afford owners of property which requires reconstruction an opportunity of carrying out this work on a standard to be laid down by the Corporation.

The ordinary procedure in the City for many years past has been that where a house was condemned as uninhabitable, the proprietors had an opportunity of so reconstructing it as to remove the objections urged by the authorities, and when this had been effectively done a re-occupation order was subsequently granted to them.

Nothing along this line is at present being accomplished, and there is certainly some indication, on the part of at least some proprietors, of a desire to do what is possible to bring their properties up to present-day standard. A feeling of uncertainty as to the present and future position of housing seems to have brought such a procedure to a complete stand-still, but if this uncertainty were removed it seems likely that some action along this line might be possible.

Of course there is the difficulty, known to all, regarding the shortage of labour. The question remains whether, if the present restrictions were to a certain extent removed, there might not be some response along the line of ordinary demand and supply. Indeed, the whole Housing question seems to be so burdened with restrictions as to suggest the possibility of these being largely contributory to the present aggravated state of matters, and however it might be accomplished, it certainly suggests itself that these, so far as possible, might be so relaxed as to relieve in some measure at any rate the present feeling of uncertainty on the part of proprietors, and to substitute the hope of some security of tenure of their property in the event of it being put into a condition commensurate with up-to-date requirements.



Overcrowding. The need of reconstruction is a very real one. This may be better realised by reference to the following figures.

Throughout the City there are—

454 tenements in each of which there are 16 tenants			
102	“	“	17 “
76	“	“	18 “
42	“	“	19 “
72	“	“	20 “

while one tenement has as many as 53.

These tenants, so called, of course, represent in the great majority of instances families, and in conditions like these it will readily be recognised that such overcrowding, accompanied by the certain insanitary conditions present, render reconstruction a positive necessity.

Overcrowding in tenements is obviously an objectionable condition of matters, but overcrowding in regard to individual houses is, of course, a condition implying much greater aggravation.

The Royal Commission laid down a standard of overcrowding as being present where more than three persons occupy one room.

Adopting this standard I find that in 1837 one-roomed houses, and in 3253 two-roomed houses in this City, overcrowding exists, and indeed the number of such houses tends naturally to be on the increase as the shortage of available accommodation continues.

Reports from  
Sub-Departments.

I have pleasure in incorporating in this issue, reports which have been supplied by the Heads of the various Sub-Departments in connection with public health administration.

These include one from Dr Ker, with special reference to the splendid work carried on in Colinton Mains Hospital; from Dr Guy, in connection with the crusade against Phthisis in the City, and with interesting details of the work carried on by him and the staff at Royal Victoria Dispensary and elsewhere; from Dr Finlay, in connection with the ever-increasing branch of work under the Maternity and Child Welfare Scheme; from Dr Lees, furnishing details of the extremely extensive and apparently ever-increasing duties devolving upon him under the Venereal Scheme; from Mr Gofton, in connection with the whole of the Veterinary work carried on in the Slaughterhouse and throughout the City generally; and an excellent résumé of the Sanitary Department of the service carried on by Mr Ritchie, Chief Sanitary Inspector.

The City is to be congratulated in having a staff of so eminent experts, each over his own particular branch of service, and, regarded as a whole, combining to form an administrative and executive staff which must be recognised as occupying a foremost position in the Department of Public Health Administration.

I am, My LORD PROVOST and GENTLEMEN,

Your obedient Servant,

A. MAXWELL WILLIAMSON, M.D., B.Sc.



# SUMMARY OF STATISTICS

For the Year 1919.

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Population of Registration Area at Census	- - -	320,769.
Population Estimated to middle of Year (including Craiglockhart Poorhouse)		339,742.
Area of City	- - -	11,416 Acres.
or, excluding the Public Parks and principal Open Spaces, approximately		6,267 Acres.
Density of Population	- - -	29·7 Persons per Acre over total Area.
Houses Inhabited	- - -	75,526.
Ratio of Population to Occupied Houses at Census	- - -	4·47.
Marriages Registered	- - -	4,690.
Births Registered	- - -	6,060, Birth-rate 17·8.
Do. (Corrected for Country Births)	- - -	5,612, Birth-rate 16·6.
Deaths (Corrected for Country Deaths)	- - -	5,583, Death-rate 16·5.
Infantile Mortality	- - -	654 Deaths under one year, or 117 per 1000 Births.
Cancer Death-rate	- - -	1·2 per 1000.
Phthisis Death-rate	- - -	·9 per 1000.
Infectious Diseases Death-rate (excluding Phthisis)	- - -	1·1 per 1000.

# SUMMARY OF STATISTICS

## For the Years 1915, 1916, 1917, 1918, and 1919.

	1915	1916	1917	1918	1919
Population Estimated to middle of year (including Craiglock- hart Poorhouse) . . . .	328,493	330,905	333,043	335,488	339,742
Area of City—Acres . . . .	11,416	11,416	11,416	11,416	11,416
Density of Population—Persons per acre . . . . .	28·7	28·9	29·1	29·3	29·7
Houses Inhabited . . . . .	73,033	73,583	74,010	74,593	75,526
Marriages Registered . . . .	3,924	3,413	3,154	3,777	4,690
Birth-Rate . . . . .	18·6	18·2	15·6	15·4	17·8
Do. (Corrected for Country Births) . . . . .	17·8	17·4	14·7	14·3	16·6
Deaths (Corrected for Country Deaths) . . . . .	16·4	14·5	14·8	15·1	16·5
Infantile Mortality . . . . .	132	100	123	94	117
Cancer Death-rate . . . . .	1·3	1·3	1·2	1·3	1·2
Phthisis Death-rate . . . . .	1·1	1·1	1·1	·9	·9
Infectious Diseases Death-rate (excluding Phthisis) . . . .	1·5	·6	1·5	·4	1·1

*Note.*—Further detailed statistics for a series of years are shown in the  
Tables throughout this Report.

# PART I.

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## VITAL STATISTICS

and

Reports relating to

Child Welfare, Tuberculosis, City Hospital, and Venereal Diseases.

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## POPULATION.

The population of the City, estimated to the middle of 1919, was 338,060. For the purposes of public health statistics, however, there fall to be added to this figure the populations resident in Colinton Mains Infectious Diseases Hospital and Craiglockhart Poorhouse, both of which institutions are situated outside the City boundary. With these additions, the population is raised to 339,742, and it is upon this figure that the various rates throughout this Report are calculated.

In previous Reports I have pointed out that the population is based upon the number of occupied houses at Whitsunday, the average number of persons per house being that ascertained at the 1911 Census. This method of estimating has also been applied to the various Wards in the City, and the figures undoubtedly provide a reliable approximation of Ward populations.

Through the courtesy of the Burgh Assessor, I am able to submit a Table showing the number of occupied houses as at Whitsunday 1919. Of these houses, 6017 have only one apartment, and 21,705 have two apartments—a total of 27,722 houses, or 36 per cent. of the total.



NUMBER OF DWELLING-HOUSES OCCUPIED AT WHITSUNDAY 1919.										
Ward.		Under £5.	£5 and under £10.	£10 and under £15.	£15 and under £20.	£20 and under £30.	£30 and under £40.	£40 and under £50.	£50 and up- wards.	Total in each Ward.
I.	Calton . . .	81	1,215	1,966	1,278	643	156	31	141	5,511
II.	Canongate . .	463	2,027	1,534	942	291	113	12	9	5,391
III.	Newington . .	50	377	559	883	730	340	290	1,375	4,604
IV.	Morningside . .	2	72	230	781	2,035	1,522	586	1,036	6,264
V.	Merchiston . .	9	199	756	1,652	1,764	479	225	651	5,735
VI.	Gorgie . . .	19	1,323	2,099	977	142	78	39	19	4,696
VII.	Haymarket . .	21	446	440	546	316	223	134	1,244	3,370
VIII.	St Bernard's . .	125	647	611	774	523	102	187	570	3,539
IX.	Broughton . .	55	546	1,086	847	846	309	116	140	3,945
X.	St Stephen's . .	142	1,058	965	835	645	323	133	397	4,498
XI.	St Andrew's . .	325	1,077	442	175	125	86	76	535	2,841
XII.	St Giles . . .	553	2,588	850	629	205	73	28	66	4,992
XIII.	Dalry . . .	26	1,661	2,645	836	64	15	1	...	5,248
XIV.	George Square . .	277	1,496	1,157	1,010	635	267	105	141	5,088
XV.	St Leonard's . .	597	2,968	1,210	510	277	138	23	3	5,726
XVI.	Portobello . .	87	552	1,112	718	578	505	385	141	4,078
Total		2,832	18,252	17,662	13,393	9,819	4,729	2,371	6,468	75,526

## MARRIAGES.

Due to demobilisation and the return of young men from the Army and Navy, there was a large increase in the number of marriages. During 1919, 4690 marriages were registered in Edinburgh, as compared with 3777 in 1918 and 3154 in 1917. The figures for 1919 represent a marriage rate of 13·8 per 1000 persons living.

With regard to the marriage rate, Edinburgh occupies the highest position among the sixteen large towns in Scotland for 1919. This is due in some measure to the fact that a very large number of "irregular" marriages take place in the City every year, and no accurate deductions can be made from the figures.

For the four quarters of 1919 the marriages were as follows:—

1st quarter . . . .	965
2nd do. . . . .	1266
3rd do. . . . .	1333
4th do. . . . .	1126
	<hr/>
	4690



The following Table gives a general survey of the increase which has taken place in the population since 1861, and at the same time shows the number of births and deaths each year since 1881, with the corresponding rate per 1000 of the population.

The figures throughout this Table have been adjusted to remove errors in estimating for intercensal years.

Years.	Population.	Deaths.	Rate per 1000.	Births Registered.	Rate per 1000.
+1861	170,444	3946	23.1	5694	33.4
+1871	196,979	5484	27.8	6874	34.8
+1881	228,346	4308	18.8	7360	32.2
1882	232,602	4292	18.4	7351	31.6
*1883	239,910	4275	17.8	6844	28.5
1884	242,802	4556	18.7	7481	30.8
*1885	245,447	4241	17.2	7372	29.9
1886	248,121	4555	18.3	7451	30.0
1887	250,824	4824	19.2	7641	30.4
1888	253,264	4374	17.2	7500	29.6
1889	256,318	4415	17.2	7414	28.9
*1890	259,110	4999	19.2	7177	27.6
+1891	261,225	5257	20.1	7382	28.2
1892	265,573	4746	17.8	7169	26.9
1893	269,105	4830	17.9	7434	27.6
1894	272,683	4350	15.9	7207	26.4
1895	276,309	5246	18.9	7402	26.6
1896	279,983	4275	15.2	7610	27.1
*1897	297,198	5782	19.4	7990	26.8
1898	301,305	5320	17.6	8097	26.8
1899	305,468	5396	17.6	8218	26.9
*1900	309,688	5396	17.4	8129	26.2
+1901	316,921	5633	17.7	7920	24.9
*1902	317,880	5113	16.0	7909	24.8
1903	318,219	4963	15.5	8112	25.4
1904	318,560	4995	15.6	7777	24.4
1905	318,777	4799	15.0	7741	24.2
1906	319,120	4868	15.2	7649	23.9
1907	319,464	4978	15.5	7504	23.4
1908	319,809	4690	14.6	7506	23.4
1909	320,282	5106	15.9	7410	23.1
1910	320,504	4651	14.5	7063	22.0
†1911	320,829	4652	14.4	§6507	20.8
‡1912	321,119	4701	14.6	6346	19.7
1913	321,645	4630	14.3	6243	19.4
1914	325,780	5025	15.4	6466	19.8
1915	328,493	5419	16.4	5851	17.8
1916	330,905	4812	14.5	5748	17.4
1917	333,043	4924	14.8	4913	14.7
1918	335,488	5090	15.1	4830	14.3
1919	339,742	5583	16.5	5612	16.6

\* City boundaries extended.

† Census year.

‡ Population of Craiglockhart Poorhouse and Colinton Mains Hospital included from this year onward.

§ The Births from this year onward are corrected for transfer births, *i.e.*, births to parents domiciled outwith the City are excluded, while births occurring to Edinburgh parents beyond the City are included.

## DEATHS AND DEATH-RATE.

During the year there were registered in the City 6066 deaths. Of this number 1017 were persons whose residence was outside the City boundaries. These deaths were transferred to the appropriate domicile. On the other hand, the deaths of Edinburgh citizens occurring in other districts, to the number of 534, fall to be added, and the net total for the City is therefore 5583, being equal to a death-rate of 16·5 per 1000 of the estimated population.

The following Table shows the allocation of the deaths in each quarter of the year, with the equivalent annual death-rates, which are based upon the net City deaths :—

Quarter.	Total Deaths Registered.	Transferred to other Districts.	Transferred from other Districts.	Nett City Deaths.	Death-rates per 1000.
1st .	2517	337	195	2375	28·2
2nd .	1252	231	113	1134	13·3
3rd .	1006	201	117	922	10·8
4th .	1291	248	109	1152	13·5
Total .	6066	1017	534	5583	16·5

In the accompanying Table, details are given as to death-rates in a number of large towns in the United Kingdom :—

TOWN.	Rate per 1000.	TOWN.	Rate per 1000.	TOWN.	Rate per 1000.
London . . . .	13·4	<b>EDINBURGH</b> . . . .	16·5	Sunderland . . . .	17·3
Glasgow . . . .	16·4	Bradford . . . .	15·9	Brighton . . . .	13·6
Liverpool . . . .	16·8	Newcastle . . . .	16·9	Derby . . . .	12·9
Manchester . . . .	14·0	Hull . . . .	15·1	Southampton . . . .	12·6
Birmingham . . . .	13·6	Nottingham . . . .	14·1	Plymouth . . . .	15·5
Leeds . . . .	16·0	Leicester . . . .	12·9	Huddersfield . . . .	14·5
Sheffield . . . .	13·7	Portsmouth . . . .	12·6	Paisley . . . .	14·2
Dublin . . . .	20·9	Cardiff . . . .	11·9	Leith . . . .	16·2
Belfast . . . .	17·9	Dundee . . . .	14·7	Greenock . . . .	17·3
Bristol . . . .	13·1	Aberdeen . . . .	14·8	Perth . . . .	15·1

Death-rate for Scotland 15·4 per 1000 ; England and Wales 13·5 ; Ireland 18·0.

On page 7 will be found a Table showing the death-rates in the various Wards of the City. It will be observed that, as usual, the death-rates are highest in the Wards situated in the centre of the City, where the housing and social conditions of the people leave much to be desired. Thus, in St Giles' Ward the rate is 19·4 per 1000, in George Square Ward 18·2, and in St Leonard's Ward 17·8 per 1000. The influence of good housing conditions and freedom from overcrowding is reflected in the comparatively light death-rates obtaining in such Wards as St Bernard's with 13·4 per 1000, and Merchiston with 13·7 per 1000.

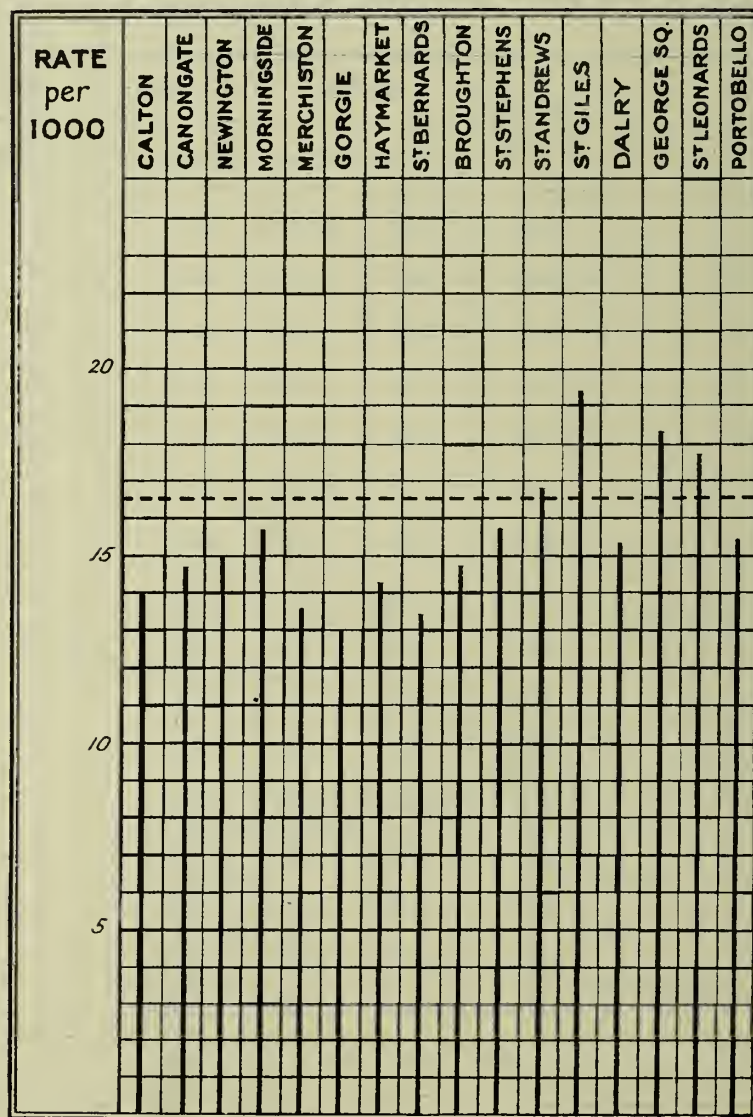
The following Table has been compiled with the object of summarising the principal mortality rates in the various Wards, and of showing the density of population and the number of one and two-roomed houses :—

Ward.	Density of Population per Acre.	Housing.		Death-rate per 1000.			Infantile Mortality.
		1 Room.	2 Rooms.	All Causes.	Phthisis.	Zymotic.	
Calton . . . . .	108·0	232	1,827	14·0	·6	1·6	109
Canongate . . . . .	25·6	553	2,273	14·8	1·2	1·7	127
Newington . . . . .	22·2	115	461	15·2	·8	·3	73
Morningside . . . . .	18·1	8	150	15·8	·5	·3	82
Merchiston . . . . .	36·6	45	768	13·7	·8	·5	87
Gorgie . . . . .	32·4	51	2,293	13·1	·6	1·1	112
Haymarket . . . . .	16·0	129	458	14·2	·3	·6	96
St Bernard's . . . . .	11·2	152	777	13·4	·6	·6	130
Broughton . . . . .	35·8	163	1,104	14·7	1·2	·7	72
St Stephen's . . . . .	99·8	395	860	15·6	·8	·5	97
St Andrew's . . . . .	58·5	715	730	16·8	·8	1·0	134
St Giles . . . . .	95·3	1,301	1,808	19·4	1·3	2·0	150
Dalry . . . . .	129·7	229	3,191	15·3	1·1	2·0	114
George Square . . . . .	98·5	633	1,562	18·2	1·1	·9	124
St Leonard's . . . . .	243·6	1,177	2,401	17·8	1·2	1·4	160
Portobello . . . . .	7·4	119	1,042	15·4	·5	1·5	106
City . . . . .	29·7	6,017	21,705	16·5	·9	1·1	117

The line diagram shows in a graphic way the mortality experienced in each Ward, and in this way a comparison can at once be made with the death-rate for the City as a whole.

### DEATH-RATE—ALL CAUSES.

PER 1000 OF POPULATION.



----- *Death Rate for City.*



Table showing the Population, etc., also the Births and Deaths in each Ward during the year.

WARD.	Estimated Population.	Area in Acres.	Density of Population per Acre.	BIRTHS.		INFANTILE MORTALITY.		PULMONARY PHTHISIS.		DEATHS.		
				Number.	Rate per 1000.	Deaths.	Rate per 1000 Births.	Number.	Rate per 1000.	OTHER INFECTIOUS DISEASES.		ALL CAUSES.
										Number.	Rate per 1000.	
Calton . . .	24,629	228	108.0	465	18.8	51	109	17	.6	40	1.6	345
Canongate . .	24,769	965	25.6	533	21.5	68	127	32	1.2	44	1.7	368
Newington . .	19,801	891	22.2	203	10.2	15	73	17	.8	7	.3	301
Morningside . .	24,668	1,358	18.1	242	9.8	20	82	14	.5	8	.3	390
Merchiston . .	24,788	677	36.6	262	10.5	23	87	20	.8	13	.5	342
Gorgie . . .	21,925	676	32.4	435	19.8	49	112	14	.6	25	1.1	289
Haymarket . .	15,394	959	16.0	176	11.4	17	96	6	.3	10	.6	220
St Bernard's .	17,152	1,524	11.2	214	12.4	28	130	11	.6	12	.6	230
Broughton . .	16,924	472	35.8	263	15.5	19	72	21	1.2	12	.7	249
St Stephen's .	18,985	190	99.8	276	14.5	27	97	16	.8	11	.5	298
St Andrew's . .	12,058	206	58.5	216	17.9	29	134	10	.8	13	1.0	203
St Giles . . .	25,358	266	95.3	498	19.6	75	150	33	1.3	52	2.0	493
Dalry . . .	24,264	187	129.7	490	20.1	56	114	28	1.1	50	2.0	372
George Square .	24,441	248	98.5	353	14.4	44	124	27	1.1	22	.9	447
St Leonard's . .	25,337	104	243.6	522	20.6	84	160	32	1.2	38	1.4	453
Portobello . .	18,344	2,465	7.4	329	17.9	35	106	11	.5	28	1.5	284
† Institutions . .	*905	...	...	135	...	14	...	8	...	13	...	243
Military Quarters .	...	...	...	...	...	...	...	3	...	1	...	56
Totals . . .	339,742	11,416	29.7	5,612	16.6	654	117	320	.9	399	1.1	5,583
												14.3
												16.5

+ Domicile not stated.

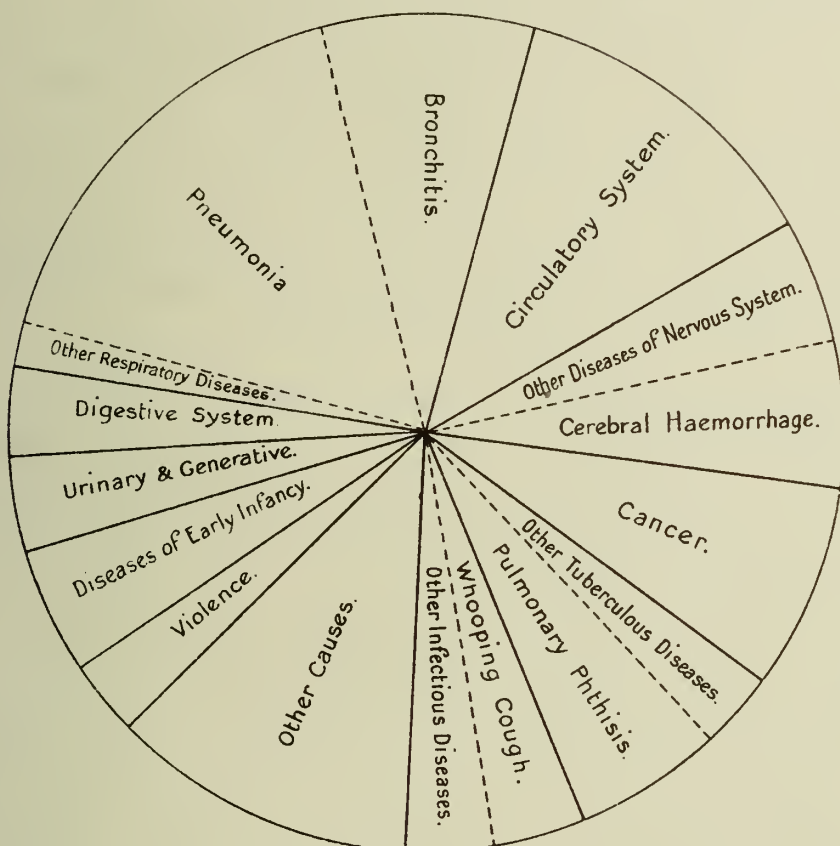
\* Population of Craiglockhart Poorhouse at 30th June 1919.

TABLE showing the number of Deaths (including Deaths transferred from other districts) and the Death-rates per 1000 of the Estimated Population during 1919 from all causes and from certain specified causes; also the Population, the number of Deaths and the Death-rates per 1000, at all ages and certain age-periods.

	Annual Death-rate per 1000	All Ages	Under 1 Year	1 and under 5 Years	Total under 5 Years	5 and under 10 Years	10 and under 15 Years	15 and under 25 Years	25 and under 35 Years	35 and under 45 Years	45 and under 55 Years	55 and under 65 Years	65 and under 75 Years	75 Years and upwards	Total above 5 Years
Age Distribution of Population	...	339742	4668	26153	30821	30776	30181	64725	58232	47356	35407	23624	13679	4941	308921
Deaths from all Causes	...	5583	654	437	1091	146	90	266	421	372	537	769	978	913	4492
Annual Death-rate per 1000	16.5	—	140.1	16.7	35.3	4.7	2.9	4.1	7.2	7.8	15.1	32.5	71.4	184.7	14.5
Enteric Fever	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhus Fever	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smallpox	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles ...	.18	62	18	44	62	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	.11	40	2	13	15	15	5	3	2	—	—	—	—	—	25
Whooping-Cough	.56	193	71	110	181	10	2	—	—	—	—	—	—	—	12
Diphtheria and Croup	.24	82	7	40	47	26	3	2	3	—	1	—	—	—	35
Influenza ...	.32	112	10	6	16	2	1	5	12	12	18	16	16	14	96
Septic Diseases { Erysipelas	.02	9	3	—	3	—	—	—	—	1	1	1	2	1	6
Gangrene	.05	18	—	—	—	—	—	—	—	1	—	2	3	12	18
Other Septic Diseases	.08	30	3	—	3	1	1	4	4	1	3	3	5	5	27
Puerperal Fever	.02	8	—	—	—	—	—	1	5	2	—	—	—	—	8
Cerebro-Spinal Meningitis	.02	7	4	1	5	—	1	—	—	1	—	—	—	—	2
Phthisis (Pulmonary Tuberculosis)	.94	320	1	7	8	5	9	54	75	71	54	26	16	2	312
Tuberculous Diseases { Tuberculous Meningitis	.12	44	6	21	27	7	5	4	—	1	—	—	—	—	17
Abdominal Tuberculosis	.09	33	5	9	14	4	1	5	3	2	3	—	1	—	19
Other Tuberculous Diseases	.22	75	10	8	18	6	8	11	5	7	5	8	7	—	57
Cancer, Malignant Diseases	1.27	432	—	1	1	—	—	—	7	34	72	146	124	48	431
Acute Articular Rheumatism (Rheumatic Fever)	.02	9	—	—	—	2	1	3	1	—	1	—	1	—	9
Diseases of Nervous System { Meningitis (not Tuberculous)	.07	25	9	7	16	—	1	2	2	1	3	—	—	—	9
Cerebral Haemorrhage	.93	318	—	1	1	—	—	—	4	5	32	69	105	102	317
Other Nervous Diseases	.74	253	19	12	31	4	4	9	11	21	34	49	47	43	222
Diseases of the Circulatory System { Pneumonia (all forms, including Broncho-Pneumonia)	2.03	691	5	2	7	3	4	16	30	28	57	141	195	210	684
Bronchitis	2.75	937	89	107	196	32	19	97	177	77	87	101	100	51	741
Other Respiratory Diseases...	1.33	455	62	9	71	3	2	1	7	16	39	57	143	116	384
Digestive Diseases { Diarrhea and Enteritis	.28	97	5	3	8	1	1	4	8	4	13	12	24	22	89
Other Digestive Diseases	.14	49	22	8	30	2	—	1	—	3	1	1	6	5	19
Violence ...	.44	151	9	3	12	7	8	10	7	14	21	31	26	15	139
Other Causes	.53	182	6	15	21	12	4	15	17	28	26	22	20	17	161
	2.79	951	288	10	298	4	10	19	41	42	66	84	137	250	653

## CAUSES OF DEATH.

On the preceding page will be found a Table setting forth the causes of death in various disease groups and age-periods, together with the death-rates pertaining thereto. The proportion of the disease groups to the total deaths is illustrated by the following diagram :—



**Infectious Diseases.** The death-rate attributable to infectious diseases was 1.1 per 1000, as compared with .4 in 1918, and 1.5 in 1917. The increase in the rate for 1919 was due to the prevalence of whooping-cough in the early months of the year, the deaths from this cause numbering 193, as against only 44 in 1918. Fuller details as to diseases included in the infectious group will be found on page 28.

**Influenza.** This disease was again present in the City in epidemic form in the early months of the year. The deaths registered as being directly due to influenza numbered 112, as against 111 for 1918. In addition to this number, 632 deaths were certified where influenza was stated to be a contributory cause, and the vast majority of these cases were complicated by one or other of the various forms of pneumonia.



The epidemic continued over a period of eight weeks, and during its prevalence enormously high mortality rates were recorded, the maximum being reached in the third week of February, when the death-rate was equivalent to 48·1 per annum per 1000 of the population. The effect of the epidemic has been to materially increase the general death-rate for the City for the year. If the 744 deaths be deducted from the total deaths occurring in the City, the death-rate would be reduced from 16·5 to 14·2—a rate which closely approximates to that of previous normal years.

**Tuberculous Diseases.** The total deaths to be recorded under this head numbered 472, which represents a death-rate of 1·40 per 1000 of the population. Included in this group are the following:—Phthisis, 320 deaths; Tuberculous Meningitis, 44; Abdominal Tuberculosis, 33; Tuberculosis of Spine, 13; Acute Miliary Tuberculosis, 6; Tuberculosis of Joints, 4; and of other organs, 52.

The death-rate from Pulmonary Phthisis was ·94 per 1000 of the population, which is in keeping with the low death-rates experienced during the past few years, the average for the previous 5 years being 1·06 per 1000.

Of the 472 deaths attributed to Tuberculous disease, 67 occurred among children under the age of 5 years, 22 of these being under one year. As regards the causes of death among children, it is interesting to note that only 14 were certified as being due to Abdominal Tuberculosis, while Tuberculous Meningitis was stated to be the cause of death in 27 cases.

On page 34 will be found a Table giving particulars of the deaths from Tuberculous diseases occurring in the City during the last 20 years. This Table demonstrates very clearly the substantial results which have followed the special efforts put forth to mitigate the ravages of this dread disease. In 1900 there were no fewer than 818 deaths from Tuberculosis; 10 years later the number had fallen to 554; while for the year presently under review, only 472 deaths have had to be recorded.

A Table is also given (page 36) showing the deaths from Pulmonary Phthisis in 1919, classified according to the Wards in which the deceased persons resided. This Table affords much valuable information as to the incidence of the disease in densely-populated areas. Thus, in St Giles' Ward, the rate is 1·3 per 1000 and in St Leonard's 1·2. On the other hand, in such Wards as Haymarket and Merchiston, where the economic conditions and general environment of the people are so vastly different, the rates are ·3 and ·5 respectively.

The subject of Tuberculosis is further dealt with on page 31.



**Cancer.** The deaths from Cancer numbered 432, of which 276 were certified as "Carcinoma," 17 as "Sarcoma," and 139 as "Malignant Disease." In the accompanying Table the deaths from Cancer have been classified according to age, sex, and the organ affected. Of the 432 deaths, 89 were attributed to Intestinal and Rectal Cancer, 78 to Stomach and Oesophagus, 54 to Female Breast, and 49 to Uterus.

Site.	SEX AND AGE PERIODS.																				TOTALS.	
	Under 15.		15-20.		20-25.		25-35.		35-45.		45-55.		55-60.		60-65.		65-75.		75 and upwards.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Brain . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	
Jaw, Face, and Ear . . . . .	...	...	...	...	...	...	...	...	...	1	3	...	2	...	1	2	3	1	1	2	16	
Tongue and Mouth . . . . .	...	...	...	...	...	...	1	...	...	...	3	...	4	1	6	...	5	1	1	...	22	
Larynx, Pharynx, and Neck . . . . .	...	...	...	...	...	...	...	...	...	...	1	2	3	...	...	...	...	...	...	1	7	
Thorax and Lungs . . . . .	...	...	...	...	...	...	1	...	...	...	1	2	1	2	3	2	...	1	...	...	13	
Breast . . . . .	...	...	...	...	...	...	...	...	...	6	...	10	...	10	...	7	...	11	...	10	54	
Stomach and Oesophagus . . . . .	...	...	...	...	...	...	...	...	2	1	8	6	12	8	5	5	13	10	4	4	78	
Liver and Gall Bladder . . . . .	...	...	...	...	...	...	...	...	1	...	7	2	2	2	4	3	3	12	1	6	43	
Intestines and Rectum . . . . .	...	...	...	...	...	...	1	1	...	4	7	2	6	8	8	10	10	20	2	10	89	
Pancreas . . . . .	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...	1	2	...	...	6	
Pylorus . . . . .	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	1	...	1	...	...	4	
Uterus . . . . .	...	...	...	...	...	...	...	3	...	13	...	11	...	6	...	5	...	10	..	1	49	
Ovaries and Vagina . . . . .	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	2	...	3	...	...	9	
Penis and Scrotum . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2	
Abdomen and Pelvis . . . . .	...	...	...	...	...	...	...	...	...	1	1	1	...	...	1	1	...	4	...	...	9	
Kidney . . . . .	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	3	...	...	...	6	
Prostate and Bladder . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	3	...	6	
Bones . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	1	...	4	
Ductless Glands . . . . .	...	...	...	...	...	...	...	...	...	...	...	1	...	2	1	1	2	2	1	...	10	
Not specified . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	4	
Totals. . . . .	M.	...	...	...	...	...	3	...	3	...	33	...	32	...	29	...	44	...	14	...	158	} 432
	F.	...	1	...	...	...	...	4	...	31	...	39	...	41	...	44	...	80	...	34	274	

The following Table shows the deaths and death-rates from Cancer in Edinburgh during the last 22 years:—

YEAR.	MALE.	FEMALE.	TOTAL.	RATE PER 1000 LIVING.
1898	104	163	267	·88
1899	112	164	276	·90
1900	116	181	297	·95
1901	110	183	293	·92
1902	127	185	312	·98
1903	130	186	316	·99
1904	125	206	331	1·04
1905	124	220	344	1·07
1906	132	198	330	1·03
1907	120	224	344	1·07
1908	123	230	353	1·10
1909	130	243	373	1·16
1910	167	220	387	1·20
1911	154	251	405	1·26
1912	139	261	400	1·24
1913	146	255	401	1·24
1914	172	277	449	1·37
1915	187	248	435	1·32
1916	190	256	446	1·34
1917	162	257	419	1·25
1918	189	265	454	1·35
1919	158	274	432	1·27

**Diseases of the Nervous System** accounted for 596 deaths, of which 286 were males, and 310 males. As regards the age incidence in this group, 48 deaths occurred among children under the age of 5 years, and of these 28 were infants under 1 year. No fewer than 297 of the deaths related to persons over 65 years of age. The deaths from Cerebral Hæmorrhage numbered 318, being equal to 53 per cent. of the total deaths classified under the Nervous System. Convulsions accounted for 26 deaths, and Meningitis for 25.

**Diseases of the Circulatory System** caused 691 deaths, of which 517 were due to Diseases of the Heart, and 174 to Diseases of the Blood Vessels. The deaths from Valvular Disease of the Heart numbered 271, Fatty Degeneration of the Heart 33, while 75 were certified as being due to Cerebral Embolism and Thrombosis, and 72 to Arterio-Sclerosis.

**Diseases of the Respiratory System.** The number of deaths to be recorded under this heading is 1489, as compared with 1341 in 1918 and 757 in 1917. The great increase in the deaths under this group during 1918 and 1919 may be ascribed to the prevalence of Influenza. Of the 1489 deaths in 1919, 70 per cent. occurred during the first quarter of the year, when Influenza was most prevalent in the City. The figures for each quarter of the year were as follows :—

1st quarter	.	.	.	1042
2nd do.	.	.	.	187
3rd do.	.	.	.	91
4th do.	.	.	.	169
				<hr/>
				1489

Deaths from Pneumonia numbered 937, or 62 per cent. of the total. Of this number 329 were certified as being due to Broncho-Pneumonia and 608 to other forms of Pneumonia. Bronchitis accounted for 455 deaths, or 30 per cent. of the total deaths under this heading. As regards age periods, 156 deaths occurred in the case of infants under 1 year, and of these 89 were due to Pneumonia and 62 to Bronchitis. The deaths included 267 persons between 65 and 75, and 189 over 75 years of age.

**Diseases of the Digestive System.** The number of deaths registered under this head was 200. Hernia and Intestinal Obstruction accounted for 44 deaths, Appendicitis 25, Gastric Ulcer 17, and only 3 deaths were certified as due to Cirrhosis of the Liver. The deaths from Diarrhœa, which include Enteritis and Gastro-Enteritis, numbered 49, of which 22 were children under 1 year and 8 between 1 and 5 years.

**Diseases and Accidents of Pregnancy.** These deaths, which include Puerperal Fever, numbered 46. The proportion of deaths to the total births in the City was 7.5 per 1000.

**Deaths by Violence** numbered 182, of which 107 were males and 75 females. Among the accidental deaths, which numbered 161, 33 were caused by falls, 29 were burning or scalding accidents, 15 were due to drowning, and 15 were caused by accidents with motor vehicles. Death from suicide was recorded in 19 cases, and from homicide in 5.

**Ill-Defined Causes.** A total of 42 deaths falls to be recorded under this head, 24 being ascribed to "Heart Failure," 13 to "Syncope," and 5 to "Other Ill-Defined Causes."

## BIRTHS.

The total births registered in the City during 1919 numbered 6060, of which 3118 were males and 2942 females. The number of illegitimate births was 780, or 12·8 per cent. of the total.

Quarter.	Number of Births Registered.	SEX.		Legitimate.	Illegitimate.	Percentage of Illegitimate to Total Births.
		Males.	Females.			
1st .	1141	579	562	961	180	15·7
2nd .	1365	700	665	1179	186	13·6
3rd .	1479	779	700	1266	213	14·4
4th .	2075	1060	1015	1874	201	9·6
Total .	6060	3118	2942	5280	780	12·8

In the following Table the actual number of births to Edinburgh citizens is shown, the figures being the result of a system of transfers adopted by the Registrar-General. The effect of the corrections is to reduce the births to 5612, which gives a birth-rate for the City of 16·6 per 1000 of the estimated population, as compared with 14·3 in 1918 and 14·7 in 1917.

Quarter.	Total Births.	Legitimate.	Illegitimate.	Percentage of Illegitimate to Total Births.
1st .	1052	910	142	13·4
2nd .	1254	1111	143	11·4
3rd .	1365	1217	148	10·8
4th .	1941	1802	139	7·1
Total .	5612	5040	572	10·2

The birth-rate was, of course, at an abnormally low level during the war years, but the increase in births recorded from quarter to quarter during 1919 indicates that the prospects in this important matter are improving rapidly. From the Table it will also be noted that, as a result of the corrections, the percentage of illegitimate births is reduced from 12·8 to 10·2—a rate which,



while high, compares favourably with other large centres in Scotland, the rate in Dundee being 11·1 per cent., and in Aberdeen 10·6. Statistics relating to the birth-rate in the various Wards of the City will be found in the Table on page 7.

For the purposes of comparison with Edinburgh, the following Table is given to show the birth-rates in the principal towns of the British Isles:—

Table comparing the Birth-Rate in Edinburgh with other large Towns.

Arranged in order of Population.

Town.	Rate per 1000.	Town.	Rate per 1000.	Town.	Rate per 1000.
London . . . .	18·3	<b>EDINBURGH</b> . . . .	16·6	Sunderland . . . .	27·3
Glasgow . . . .	23·2	Bradford . . . .	13·6	Brighton . . . .	14·7
Liverpool . . . .	23·5	Newcastle . . . .	23·3	Derby . . . .	19·6
Manchester . . . .	18·2	Hull . . . .	20·0	Southampton . . . .	19·6
Birmingham . . . .	20·3	Nottingham . . . .	18·2	Plymouth . . . .	22·4
Leeds . . . .	17·6	Leicester . . . .	15·6	Huddersfield . . . .	12·8
Sheffield . . . .	21·1	Portsmouth . . . .	22·3	Paisley . . . .	21·8
Dublin . . . .	23·4	Cardiff . . . .	18·3	Leith . . . .	22·5
Belfast . . . .	25·7	Dundee . . . .	18·7	Greenock . . . .	28·7
Bristol . . . .	18·1	Aberdeen . . . .	20·2	Perth . . . .	16·2

Birth-rate—England and Wales 18·5 per 1000 ; Scotland 21·7 per 1000 ; Ireland 20·4 per 1000.

## INFANTILE MORTALITY.

Children of less than one year old whose deaths were recorded during 1919 numbered 654, which represents a mortality rate of 117 deaths per 1000 births. While the infantile death-rate for the year under report is higher than that recorded in 1918, it is well to bear in mind that the success of the efforts which are being made to safeguard infant life in the City can hardly be estimated by the results of a single year. The following figures, showing the average mortality rate among infants for the last three decennial periods, indicate the enormous improvement that has taken place. The rate for the last 10 years in itself seems to amply justify the adoption of the Notification of Births Act in 1907, and the formation of a Child Welfare Scheme in 1917.

Average for 10 years.			
1890-1899	.	.	143 deaths per 1000 births.
1900-1909	.	.	122 „ „ „
1910-1919	.	.	110 „ „ „

For the purposes of comparison, the infantile mortality rates in the eight large towns of Scotland are shown :—

				Per 1000 Births.					Per 1000 Births.
Glasgow	...	...	...	114	Paisley	...	...	...	100
<b>Edinburgh</b>	...	...	...	117	Leith	...	...	...	108
Dundee	...	...	...	126	Greenock	...	...	...	99
Aberdeen	...	...	...	118	Perth	...	...	...	103

A factor which must be taken into account when considering infantile mortality is the problem of the “unwanted baby,” and the chances it has of surviving the first year of life. I have given much consideration to this very important and urgent matter, and am satisfied that little progress can be made in reducing the enormously high death-rate which is year after year recorded amongst illegitimate children, until something is done on a large scale to provide better facilities for the upbringing of these. Almost the only course open to the mother of such a child is to hand it over to the care of unknown persons, who generally regard the transaction more from a business than a humanitarian point of view. This system is open to grave objection, and the figures which I submit below clearly demonstrate that the chances of the illegitimate child surviving the first year of life are much less than those of the legitimate child which enjoys the advantage of its mother’s care.

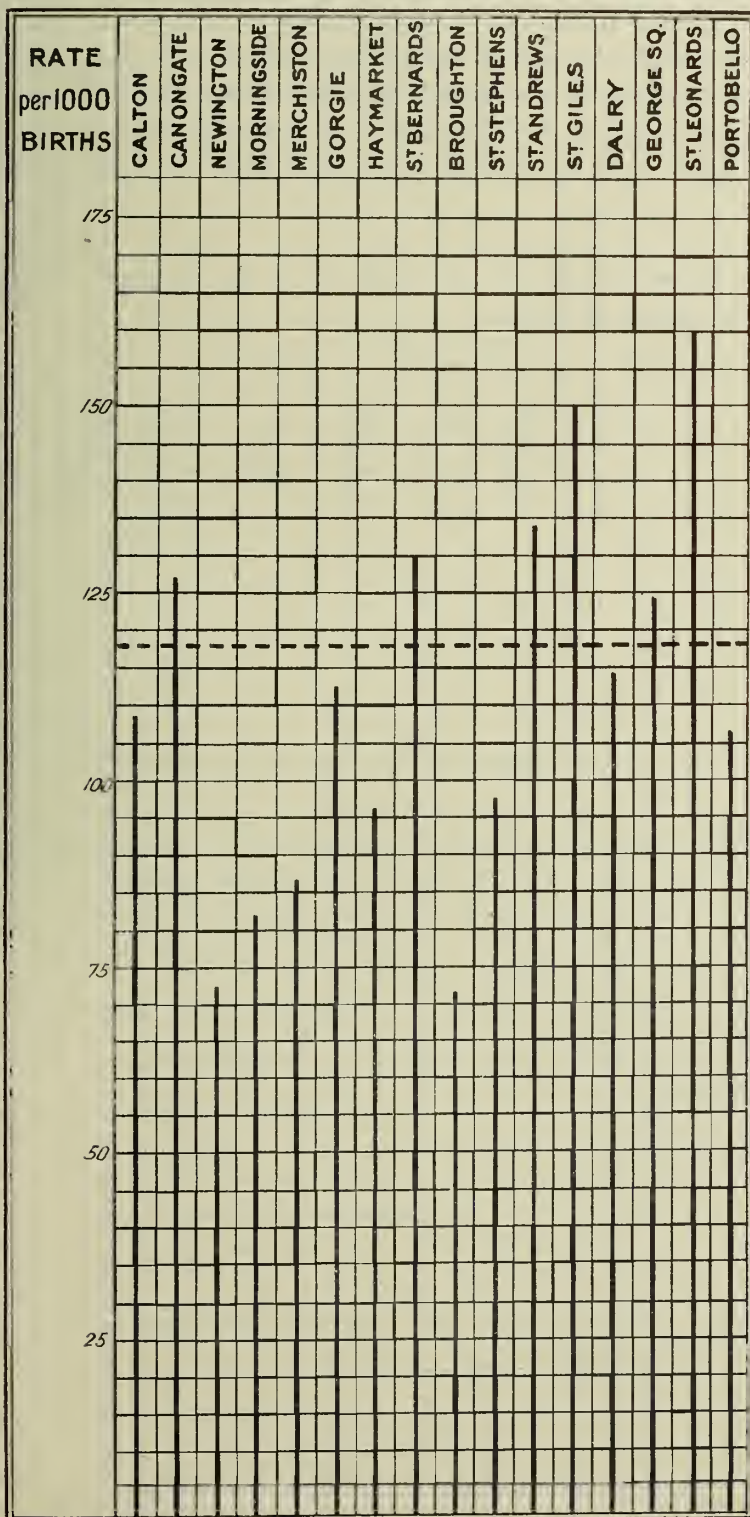
INFANTILE MORTALITY—EDINBURGH.

YEAR.	Deaths under 1 Year per 1000 births	
	Legitimate Children.	Illegitimate Children.
1913	96	152
1914	106	151
1915	130	151
1916	99	110
1917	113	212
1918	79	198
1919	105	211

The following Diagram is introduced to show the relative incidence of infantile mortality in the various Wards of the City. It will be readily observed that the death-rates are, as usual, highest in the densely-populated Wards, in many parts of which the housing conditions are far from satisfactory. These "black spots" are, without doubt, responsible for an unduly large proportion of the infantile mortality rate recorded for the City as a whole.

### INFANTILE MORTALITY.

DEATHS PER 1000 BIRTHS.



----- *Infantile Mortality Rate for City.*



## MATERNITY AND CHILD WELFARE.

The following Report in connection with Child Welfare has been prepared by Dr T. Y. Finlay, who is in charge of this branch of the Department's activities :—

I have the honour to submit the Annual Report of the Maternity and Child Welfare Department for the year 1919. As I have not been in office during the whole of the period, the Report which I submit must necessarily be of a very general character. I have been enabled to study the problems of Child Welfare as they specially affect this City. One must realise that all Child Welfare work is still in its infancy, and much still requires to be done. The chief aim is not so much to do things for the mothers as to educate and to show them how to do things for themselves. Though it may not always be possible immediately to improve the conditions under which many of the families have to live, a great deal can be done by showing the mothers how, by well-ordered management, the health and happiness of the home can be vastly improved even under obviously adverse conditions. All this involves a slow process of education, and immediate results cannot be expected. It has been truly stated that there is a natural order of things from which we cannot escape, and which follows in sequence as surely as the night follows the day—better parents, better infants, better school children, better fathers and mothers, better citizens, better city, better state and nation—it is to this sequence that the saving of infant life is dedicated.

In the Table below details are set forth as to the deaths of infants at different age-periods, and the causes of death :—

CAUSE OF DEATH.	Under 1 Week.	1, and under 2 Weeks.	2, and under 3 Weeks.	3, and under 4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total under 1 Year.
Smallpox . . . . .	...	...	...	...	...	...	...	...	...	...
Chickenpox . . . . .	...	...	...	...	...	...	1	...	...	1
Measles . . . . .	...	...	...	...	...	2	...	8	8	18
Scarlet Fever . . . . .	...	...	...	...	...	...	1	...	1	2
Whooping Cough . . . . .	...	...	...	1	1	6	14	32	18	71
Diphtheria and Croup . . . . .	...	...	...	...	...	1	1	2	3	7
Erysipelas . . . . .	...	...	...	1	1	...	...	...	2	3
Tuberculous Meningitis . . . . .	...	...	...	...	...	...	3	1	2	6
Abdominal Tuberculosis . . . . .	...	...	...	...	...	2	...	1	2	5
Other Tuberculous Diseases . . . . .	...	1	...	...	1	1	5	1	2	10
Meningitis (not Tuberculous) . . . . .	...	...	...	...	...	2	2	1	4	9
Convulsions . . . . .	1	...	2	2	5	5	7	2	1	20
Pneumonia (all Forms) . . . . .	1	1	1	4	7	9	24	22	27	89
Bronchitis . . . . .	...	1	2	2	5	11	23	13	10	62
Laryngitis . . . . .	...	...	...	...	...	...	...	1	...	1
Diarrhoea and Enteritis . . . . .	...	...	...	1	1	6	10	3	2	22
Other Digestive Diseases . . . . .	...	2	...	...	2	1	1	3	2	9
Congenital Malformation . . . . .	4	2	3	3	12	3	3	...	2	20
Premature Birth . . . . .	95	12	13	5	125	13	1	...	...	139
Atrophy, Debility and Marasmus . . . . .	38	8	3	4	53	27	12	2	...	94
Atelectasis . . . . .	3	...	1	...	4	1	...	...	...	5
Injury at Birth . . . . .	3	1	...	1	5	...	...	...	...	5
Suffocation, overlaying . . . . .	...	...	...	...	...	...	1	...	...	1
Syphilis . . . . .	1	1	2	2	6	5	1	...	...	12
Rickets . . . . .	...	...	...	...	...	...	...	...	...	...
All other Causes . . . . .	12	1	2	...	15	4	12	7	5	43
Total . . . . .	158	30	29	26	243	99	122	99	91	654



Of the 654 deaths, 243 occurred before the infants had reached the age of four weeks, and of these 158 were under one week. The deaths from prematurity accounted for 139, and debility and atrophy for 94.

Among other causes of Infant Mortality, Whooping Cough accounts for 71 deaths as compared with 14 for the previous year; Pneumonia also figures prominently, and under this disease, no doubt, many cases are included which were primarily cases of Whooping Cough with a terminal Pneumonia. Investigations are at present being undertaken to test the value of Protective Vaccination against Whooping Cough, and if the results prove successful, it is hoped that a substantial reduction may be effected on cases of this very fatal disease of infancy.

If we had an epidemic of plague, people would be terror-stricken—even the fear of a Smallpox epidemic causes parents to rush and have their children vaccinated—whereas Whooping Cough is passed over with indifference; and yet this disease causes thousands of infantile deaths annually. As Rucher says, “If Bubonic Plague were to kill as many thousands of children in the United States in one year, the world would quarantine that country. A child dead of Whooping Cough is just as dead as a child dead of plague.”

Since the year 1917, when the Municipal Child Welfare Scheme was started, there has been a regular and striking reduction in the number of deaths under one year from Diarrhoea and other Digestive Disorders, showing the important results to be obtained by the regular supervision of the feeding of infants as carried out at the infant clinics and by home visitation. The following Table gives the number of deaths from these causes from the year 1914.

DATE.	DIARRHOEA.	OTHER DIGESTIVE DISORDERS.	TOTAL.
1914	84	10	94
1915	63	12	75
1916	61	21	82
1917	41	13	54
1918	33	14	47
1919	22	9	31

**Neo-natal Mortality.**—The neo-natal mortality rate for the year was 43·3 per 1000 live births.

**Illegitimate Deaths.**—The number of illegitimate babies who died in Institutions is shown in the following Table.

City Hospital	-	-	-	-	10
Sick Children's Hospital	-	-	-	-	12
Deaconess Hospital	-	-	-	-	3
Royal Maternity Hospital	-	-	-	-	6
The Hospice	-	-	-	-	1
Edinburgh Women's Hospital	-	-	-	-	1
Infant Homes	-	-	-	-	2
Craiglockhart Poorhouse	-	-	-	-	38
Total	-	-	-	-	73

The following Table shows the number of illegitimate infants who died in each of the Wards of the City.

I. Calton	-	-	-	-	-	3
II. Canongate	-	-	-	-	-	4
III. Newington	-	-	-	-	-	1
IV. Morningside	-	-	-	-	-	6
V. Merchiston	-	-	-	-	-	4
VI. Gorgie	-	-	-	-	-	7
VII. Haymarket	-	-	-	-	-	4
VIII. St Bernard's	-	-	-	-	-	3
IX. Broughton	-	-	-	-	-	3
X. St Stephen's	-	-	-	-	-	6
XI. St Andrew's	-	-	-	-	-	7
XII. St Giles	-	-	-	-	-	10
XIII. Dalry	-	-	-	-	-	7
XIV. George Square	-	-	-	-	-	16
XV. St Leonard's	-	-	-	-	-	20
XVI. Portobello	-	-	-	-	-	4
Institutions (not allocated to Wards)	-	-	-	-	-	16
Total	-	-	-	-	-	121

The Table on page 21 shows the number of deaths of illegitimate infants at various age periods up to five years, also the causes of these deaths. There were 148 such deaths. Of the total, 121 died under the age of one year and 27 between one and five years of age.

It should be borne in mind that, as an index of the value of infant protection work, the infant mortality rate is only of relative value; to arrive at a sound deduction one must take into account another factor, namely, the infant and child morbidity rate, which we have no means of showing in statistical form. If we take into account the far-reaching effects of chronic ill-health in the family, with its attendant anxieties and worries, any reduction in this morbidity rate must reflect itself as an enormous saving to the community.

**Ante-natal Clinics.**—Ante-natal clinics have, as formerly, been held at the various centres and at the Royal Maternity Hospital. The numbers of expectant mothers attending have largely increased, and subsequent visits to the homes have been made in all cases by the Official Health Visitors, thus ensuring that suitable arrangements are made for the period of confinement. Dinners and milk have been given in necessitous cases. The outstanding feature of these clinics this year, and, from the preventive point of view, the most hopeful, has been the fact that women are coming for advice at an increasingly earlier period in their pregnancy than formerly.

Table showing the ages of illegitimate children dying last year, and the causes to which their deaths have been attributed.

CAUSE OF DEATH.	Under 1 Week.	1, and under 2 Weeks.	2, and under 3 Weeks.	3, and under 4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total under 12 Months.	12 Months and under 2 Years.	2, and under 3 Years.	3, and under 4 Years.	4, and under 5 Years.	Total under 5 Years.
Smallpox . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chickenpox . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles . . . . .	...	...	...	...	...	...	...	3	1	4	...	...	...	...	4
Scarlet Fever . . . . .	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Whooping Cough . . . . .	...	...	...	...	...	...	4	1	2	7	5	1	1	1	15
Diphtheria and Croup . . . . .	...	...	...	...	...	1	1	...	...	2	...	1	...	1	4
Erysipelas . . . . .	...	...	...	1	1	...	...	...	...	1	...	...	...	...	1
Tuberculous Meningitis . . . . .	...	...	...	...	...	...	1	...	...	1	2	...	...	...	3
Abdominal Tuberculosis . . . . .	...	...	...	...	...	1	...	1	...	2	1	...	...	...	3
Other Tuberculous Diseases . . . . .	...	...	...	...	...	1	4	...	1	6	1	...	...	...	7
Meningitis (not Tuberculous) . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Convulsions . . . . .	...	...	...	...	...	1	1	...	...	2	3	...	...	...	5
Pneumonia (all Forms) . . . . .	...	...	1	...	1	1	7	4	...	13	3	...	...	...	16
Bronchitis . . . . .	...	...	...	...	...	1	2	1	...	4	...	1	...	...	5
Laryngitis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea and Enteritis . . . . .	...	...	...	...	...	2	2	...	...	4	1	...	...	...	5
Other Digestive Diseases . . . . .	...	1	...	...	1	1	...	...	...	2	...	...	...	...	2
Congenital Malformations . . . . .	...	1	...	...	1	...	...	...	1	2	...	...	...	...	2
Premature Birth . . . . .	8	...	2	2	12	2	...	...	...	14	...	...	...	...	14
Atrophy, Debility, and Marasmus . . . . .	8	1	2	3	14	15	8	2	...	39	...	...	...	...	39
Atelectasis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Injury at Birth . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suffocation—Overlaying . . . . .	...	...	...	...	...	...	1	...	...	1	...	...	...	...	1
Syphilis . . . . .	1	...	2	...	3	5	1	...	...	9	...	...	...	...	9
Rickets . . . . .	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
All other Causes . . . . .	1	...	...	...	1	1	2	3	1	8	1	...	1	...	10
Total . . . . .	19	2	7	6	34	32	34	15	6	121	18	4	3	2	148

**Infant Clinics.**—Preventive clinics, as in the past, have been regularly held in the afternoons at the various centres. In all 539 such clinics have been held, with a total attendance of 11,516 infants. 1552 individual cases have been seen during the year, of whom 480 had already attended during 1918, leaving 1072 who attended for the first time. It is a sign of the success of these clinics that of the 1072 new cases the large majority, namely, 822, were of infants under one year, leaving 250 only who were over the year.

Every effort is made at these clinics to educate the mothers in the simple rules of infant hygiene; when curative treatment is called for, cases are referred to their own doctors, or failing such, to one or other of the curative clinics. There is no doubt that, as a rule, the class of mother who attends such clinics seldom seeks the advice of her doctor before her child has become really ill. She often overlooks the very beginnings of disease. One of the aims of a preventive clinic is to detect these very beginnings of disease so that a mother can be advised to consult a doctor early and thus give him a chance to deal effectively with the condition in its most hopeful stage, and not when it is far advanced, for then the treatment is more difficult and the results often less satisfactory. The object of these clinics, therefore, is to co-operate with the general practitioner and not to take the treatment out of his hands.

Experience has shown that those infants who are brought regularly to the preventive clinics mostly show a satisfactory weight curve, whereas those who for various reasons are brought at irregular intervals seldom show so satisfactory a result.



At one of the centres a special clinic has been started for the treatment by massage of early cases of Rickets. Though it is too early yet to express a definite opinion of the results, the experience so far gained suggests that great benefit in such cases is to be expected from this method of treatment.

When the circumstances of the parents warrant it, free or assisted milk is given, and dinners, where necessary, are provided for nursing mothers. In all cases, however, mothers are encouraged to attend the clinics for their educative value, and not primarily for the benefits of milk or dinners which it may be found necessary to supply. Much of the success of these infant clinics is due to the various part-time doctors who, by regular attendance and advice, have striven to keep up a high standard of efficiency at these Welfare Centres.

**Health Visitors.**—During the year two vacancies have occurred on the staff of Official Health Visitors, and these have been filled by the appointment of Miss Moses and Miss Nicol.

The members of the staff have paid 5982 first visits on the districts, and 54,900 subsequent visits; also, 1640 visits were made to expectant mothers who had attended the ante-natal clinics. In addition, clinics have been held, at each of which one or other member of the staff has been in attendance.

All cases notified as having left the various hospitals and institutions in the City have been followed up by the Official Health Visitors. The benefit of such visits is best illustrated in the case of children who have been discharged from the Fever Hospital. In these cases one visit is paid immediately, and a subsequent visit a few days later, and if during the interval any discharge has appeared from the eyes, nose, or ears, the mother is shown how to deal with this complication and warned of the possible dangers of infection to others, and especially to any younger members of the family. In this way an attempt is made to control the spread of infection.

The members of the Voluntary Health Visitors Association have, as formerly, worked in close co-operation with the Department, and a record of what they have accomplished is shown in the following Table.

CASES RECEIVED.		CASES DISPOSED OF.		DETAILS OF CASES UNNECESSARY TO VISIT.			
Balance from 1918	- 1146	Completed one year	- 956	Objectors	-	-	22
New Cases	- - 1681	Lost sight of	- - 68	Unsuitable	-	-	89
		Dead	- - - 139	Adopted	-	-	7
		Left Edinburgh or visited areas	- - - 146	Boarded	-	-	4
		Unnecessary to visit	- 220	To Nurse	-	-	58
		Balance still visited	- 1298	To Poorhouse	-	-	10
				In Homes	-	-	13
				Duplicates	-	-	17
	<u>2827</u>		<u>2827</u>				<u>220</u>

**Play Centres.**—A committee of the same Association take an interest in the management of the six play centres in the City. The average attendance at these centres has been between 20 and 30 children daily, and experience shows that the centres



are becoming more and more popular with the mothers. It is a noteworthy feature of these centres that the children attending seldom show the Chronic Nasal Catarrh so prevalent in the slum child. Most of the children on first attending show its presence, but by well directed exercises in the open air and without any special therapeutic agent it rapidly clears up. When one realises the vast amount of subsequent chronic ill-health resulting to the child from this condition it is obvious that these play centres must certainly have far-reaching effects in the prevention of disease. They are inexpensive to carry on, and their further development would be fully justified.

**Day Nurseries.**—The work of the four day nurseries has gone on uninterrupted during the year. The number of children attending shows a tendency to increase, in spite of the fact that every possible care is taken to admit only children of mothers who for various reasons are compelled to go out and work for their living. Day nurseries are necessary evils—the natural place for an infant is with its mother—but in these days they fill a well-felt need in the City, and another one might profitably be opened in the Greenside district.

**Child Gardens.**—During the year medical supervision has been maintained over the four child gardens subsidised by the municipality, and suitable treatment has been arranged for where such was found to be necessary.

**Convalescent Homes.**—During the year numerous children have been admitted to Gogarburn House. The weight of each child was taken regularly every week, and, with one or two exceptions, they all showed a substantial gain. The erection of an isolation hut should materially increase the usefulness of this institution, and minimise, if not entirely abolish, the risk of infectious disease in the main house.

The Home at Duddingston for deserving mothers and their babies has been widely taken advantage of, and all who have been recommended for a change there have benefited greatly. The patients sent to the Home during 1919 included—

Pregnant mothers	.	.	.	.	15
Nursing mothers	.	.	.	.	64
Children	.	.	.	.	86

Where for some reason—either the impending confinement of a mother or the necessity for the hospital treatment of a mother—it has been found necessary to have the family looked after, arrangements have been made to relieve the mother of her responsibility until she was able once more to resume her domestic duties. Through the kind co-operation of Mrs Stirling Boyd, the Children's Village Home at Humbie and the homes at Leadburn have been largely taken advantage of in making the above arrangements, and I desire here to express my appreciation of her valuable help.

The illegitimate problem is always a difficult matter, but we are fortunate in this City in having two excellent homes for illegitimate babies and their mothers—these are the Edinburgh Infant Home and the Salvation Army Home—and both these institutions have proved a boon to many an unfortunate girl.

**Ophthalmia Neonatorum.**—The number of cases notified during the year as Ophthalmia Neonatorum was 67.

**Tuberculosis.**—All cases of Tuberculosis or suspected Tuberculosis have been referred to the Tuberculosis Department, and the expert opinion of the Tuberculosis Officer obtained. Dr Guy and I have examined many such cases together at the Victoria Dispensary.

**Venereal Diseases.**—From the 1st of March to the end of the year the treatment of Venereal Diseases in mothers and infants was under the charge of Dr Mary M'Nicol, arrangements having been made to have such cases treated at the Edinburgh Hospital for Women. During this period 60 infants and children have been under her care, and of these 19 were admitted to hospital and 41 were treated as out-patients. The ages varied between three weeks old and eight months, only 9 cases out of the total being over one year. Four deaths occurred amongst those who were admitted as in-patients. All the other cases have been followed up, and are reported to be doing well. As far as possible the mothers are encouraged to attend the infant clinics, so as to ensure the regular continuance of the treatment for the necessary period of two years. In many cases Dr M'Nicol has been able to reach the parents through the children, and has undertaken treatment in their case as well. In this way real preventive work has been accomplished and many potential lives saved.

In conclusion, I desire to express my appreciation of the work done during the year by the official staff, and my gratitude to all the ladies who have carried on voluntary work in co-operation with the Department. These include the members of the Voluntary Health Visitors Association, the Committee of Management of the Infant Welfare Clinics, the Committee of the Day Nurseries, the ladies at the play centres and of the various work parties, the Council of Social Service, and Miss Hepburn at "the Shelter," and also the Jubilee Nurses who have been called upon to nurse mothers and children in the district. To one and all I am indebted for much encouragement and valuable help in my work.

I have, Sir, the honour to remain,

Your obedient Servant,

T. Y. FINLAY, M.D.

## INFECTIOUS DISEASES.

The various diseases which fall to be dealt with under this head include :—

- (1) Those which are notifiable in terms of the Infectious Diseases Notification Act, 1899, and Orders by the Local Government Board or Scottish Board of Health (enumerated in the following Table); and
- (2) Those which are **not** notifiable, and in regard to which no statistics as to the incidence of the disease are available, viz. :—Measles, Whooping Cough, Chickenpox, and Mumps.

There were notified during the year 3560 cases of Infectious Disease, and details as to the prevalence in each month of the year are given below :—

Disease.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Smallpox . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria and Membranous Croup	56	51	54	36	38	48	44	52	59	91	94	111	734
Erysipelas . . . . .	10	6	11	13	13	12	10	21	14	22	20	25	177
Scarlet Fever . . . . .	56	53	78	61	61	53	76	90	151	364	237	179	1459
Typhus . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever . . . . .	...	...	2	...	1	...	1	1	1	...	...	...	6
Relapsing Fever . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever . . . . .	...	3	...	1	1	2	1	...	2	2	6	1	19
Plague . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Fever . . . . .	2	2	3	3	2	...	2	1	...	...	...	...	15
Acute Anterior Poliomyelitis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis, Pulmonary . . . . .	42	53	51	49	74	54	39	42	42	61	33	62	602
Tuberculosis, other forms . . . . .	22	30	26	32	30	27	26	24	29	22	17	28	313
Ophthalmia Neonatorum . . . . .	1	...	...	2	3	9	10	6	9	9	9	9	67
Malaria . . . . .	...	...	...	...	...	...	...	2	31	43	10	4	90
Dysentery . . . . .	...	...	...	...	...	...	...	...	3	5	...	...	8
Trench Fever . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Primary Pneumonia . . . . .	...	...	...	...	...	...	...	...	15	19	17	19	70
Acute Influenzal Pneumonia . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Total . . . . .	189	198	225	197	223	205	209	239	356	638	443	438	3560



In order that a comparison may be arrived at as between previous years in regard to the prevalence of Infectious Disease, it is necessary to deduct the notifications which were added to the list of notifiable diseases in the month of August 1919, viz.:— Malaria, Dysentery, and Acute Primary Pneumonia. This leaves a total of 3392 cases for the year. In the previous five years the totals were as follows:—

1914	1915	1916	1917	1918	1919
4450	4152	3583	2670	2702	3392
Average=3511.					

The increase in 1919 as compared with 1918 was due to an outbreak of Scarlet Fever in the last quarter of the year.

The appended Table gives particulars as to the number of patients treated in the City Hospital and Portobello Hospital during the year. The figures include patients admitted under arrangement with the Corporation of Leith, besides a number of naval and military patients from districts outwith the City boundary.

Disease.	Remaining 31st December 1918.			Year 1919.			Remained 31st December 1919.		
	Adults.	Children.	Total.	Admitted.	Discharged.	Died.	Adults.	Children.	Total.
CITY HOSPITAL—									
Pulmonary Phthisis . . . . .	162	17	179	663	499	162	163	18	181
Other Tuberculous Diseases . . . . .	...	...	...	6	...	...	1	5	6
Smallpox . . . . .	...	...	...	...	...	...	...	...	...
Typhus . . . . .	...	...	...	...	...	...	...	...	...
Enteric, Relapsing, and Continued Fever . . . . .	...	...	...	15	14	1	...	...	...
Puerperal Fever . . . . .	...	...	...	8	5	2	1	...	1
Diphtheria, Membranous Croup . . . . .	35	72	107	1002	881	97	42	89	131
Scarlet Fever . . . . .	65	84	149	1710	1570	42	67	180	247
Erysipelas . . . . .	10	...	10	101	96	8	7	...	7
Cerebro-Spinal Fever . . . . .	...	1	1	15	7	9	...	...	...
Measles . . . . .	4	6	10	545	490	47	3	15	18
Whooping-Cough . . . . .	...	28	28	244	191	78	...	3	3
Mumps . . . . .	5	...	5	64	68	...	...	1	1
Chickenpox . . . . .	...	2	2	24	25	...	...	1	1
Ophthalmia Neonatorum . . . . .	...	...	...	14	12	2	...	...	...
Influenza . . . . .	15	8	23	379	305	95	2	...	2
Other Diseases and observation . . . . .	9	7	16	512	463	50	5	10	15
PORTOBELLO HOSPITAL—									
Scarlet Fever . . . . .	2	1	3	29	24	...	...	8	8
Total . . . . .	307	226	533	5331	4650	593	291	330	621



57/2

500 - 000 -

$\frac{1027}{13} = 79$

$(iv) \quad q_{00} = .001$

$$\begin{array}{r} 25 \\ 15 \\ \hline 125 \\ 25 \\ \hline 275 \end{array}$$

25

896119148277758271

35 160 185 910 190 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1041 1042 1043 1044 1045 1046 1047 1048 1049 1050 1051 1052 1053 1054 1055 1056 1057 1058 1059 1060 1061 1062 1063 1064 1065 1066 1067 1068 1069 1070 1071 1072 1073 1074 1075 1076 1077 1078 1079 1080 1081 1082 1083 1084 1085 1086 1087 1088 1089 1090 1091 1092 1093 1094 1095 1096 1097 1098 1099 1100 1101 1102 1103 1104 1105 1106 1107 1108 1109 1110 1111 1112 1113 1114 1115 1116 1117 1118 1119 1120 1121 1122 1123 1124 1125 1126 1127 1128 1129 1130 1131 1132 1133 1134 1135 1136 1137 1138 1139 1140 1141 1142 1143 1144 1145 1146 1147 1148 1149 1150 1151 1152 1153 1154 1155 1156 1157 1158 1159 1160 1161 1162 1163 1164 1165 1166 1167 1168 1169 1170 1171 117

109  
7.01  
9.11  
B.21

2

1/5. 2  
 1/3. 2  
 1/4. 2  
 1/5. 2

5.5	4.3	1.28
7.0	5.6	1.25 1.32
8.4	7.2	1.31
9.6	8.2	1.30
12	9.1	1.30
13.2	10.2	1.30
14.0	11.2	1.30
15.3	12.5	1.33
16.4	12.7	1.33

1.3	1.22
1.58	1.40

$$1.3 \overline{) 1.58} \quad (1.22$$

$$\begin{array}{r} 1.3 \\ 28 \\ \hline 26 \end{array}$$

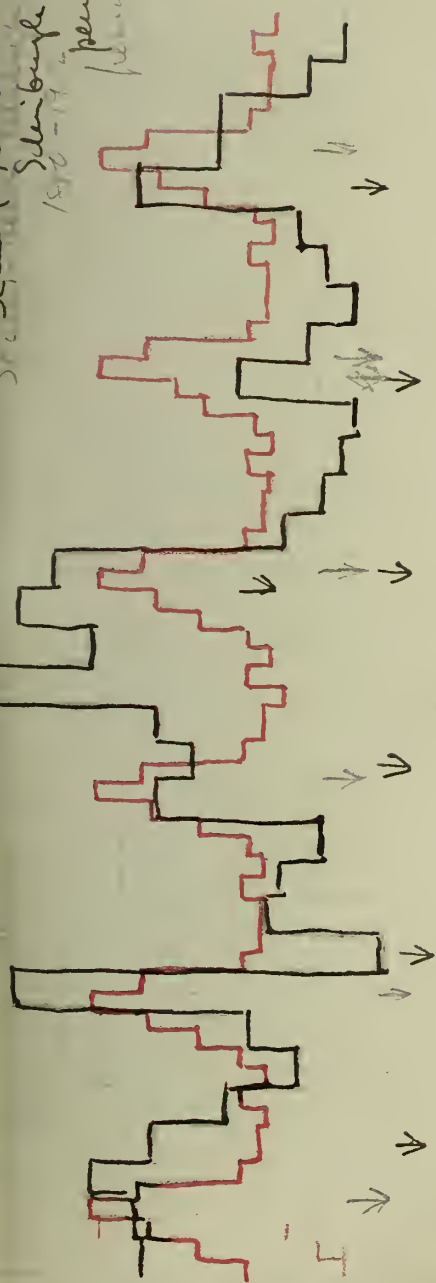
$$1.22 \overline{) 1.40} \quad (1.11$$

$$\begin{array}{r} 1.22 \\ 180 \\ \hline 12.2 \\ \hline 180 \end{array}$$

$$12.7 \overline{) 16.7} \quad (1.31$$

$$\begin{array}{r} 127 \\ 40 \\ \hline 381 \\ \hline 190 \end{array}$$

S. Scam. form  
S. Scam. form 1880-1912  
1880-1912  
period 1880-1912  
period 1880-1912







In the Table on page 28 the notifications and deaths from various Infectious Diseases are tabulated according to Wards. The case-rate per 1000 of the population is given for each disease, and for the purpose of comparison the case-rates for the previous five years are also shown.

On page 29 will be found a Table setting forth the incidence of Infectious Disease in the City since 1880. In the Table on page 30 the percentage of cases admitted to Hospital is shown. It is gratifying to note in this connection that the popularity of Hospital treatment still continues. In 1890 only 29 per cent. of the cases of Diphtheria were removed to Hospital, while in 1919, 97 per cent. of the cases notified were treated in Hospital. A similar experience has to be recorded in regard to Scarlet Fever. In 1890 only 40 per cent. of the cases occurring in the City were treated in Hospital, as compared with 98 per cent. in 1919. A glance at the Table will show that in general the same remarks apply to the other forms of Infectious Disease.

Table showing the Infectious Disease Notifications and Deaths (except Phthisis) in each Ward during the Year.

WARDS.	SMALLPOX.		TYPHUS.		ENTERIC.		PUERPERAL.		DIPHTHERIA.		SCARLET.		ERYSIPELAS.		CEREBRO-SPINAL FEVER.		TOTAL.	
	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.
Calton -	...	...	...	...	...	...	...	...	64	11	93	3	19	...	...	...	176	14
Canongate -	...	...	...	...	...	...	3	1	33	6	108	2	12	1	1	...	157	10
Newington -	...	...	...	...	...	...	1	1	32	2	50	1	11	...	...	...	94	5
Morningside -	...	...	...	...	...	...	...	...	41	3	50	1	4	...	1	...	96	5
Merchiston -	...	...	...	...	...	...	2	...	33	4	60	1	7	...	1	...	103	7
Gorgie -	...	...	...	...	...	...	...	...	61	3	111	2	13	...	1	...	186	7
Haymarket -	...	...	...	...	...	...	...	...	32	3	47	2	4	...	1	...	84	6
St Bernard's -	...	...	...	...	1	...	...	...	40	5	100	1	4	...	...	...	145	6
Broughton -	...	...	...	...	...	...	...	...	44	4	84	2	10	...	...	...	138	6
St Stephen's -	...	...	...	...	...	...	1	...	44	1	129	1	8	...	1	...	183	3
St Andrew's -	...	...	...	...	...	...	1	...	23	3	67	1	4	...	...	...	95	4
St Giles -	...	...	...	...	1	...	3	1	35	4	51	2	12	...	...	...	102	8
Dalry -	...	...	...	...	...	...	...	...	101	14	211	8	8	...	1	...	321	25
George Square -	...	...	...	...	...	...	2	...	38	6	73	2	17	...	2	...	132	9
St Leonard's -	...	...	...	...	...	...	2	2	35	4	65	3	15	...	2	...	119	9
Portobello -	...	...	...	...	1	...	1	1	25	1	70	2	18	...	...	...	115	5
Public Institutions (staff & country patients) -	...	...	...	...	1	...	3	1	45	4	68	5	10	...	2	...	129	13
Military Quarters -	...	...	...	...	2	...	...	...	8	1	22	...	1	...	2	...	35	2
Total -	...	...	...	...	6	...	19	9	734	79	1459	39	177	10	15	7	2410	144
Case- and Death-rates (per 1000 of population) for year 1919 -	...	...	...	...	·01	...	·05	·02	2·16	·23	4·29	·11	·52	·02	·04	·02	7·09	·42
Case- and Death-rates (per 1000 of population) for the preceding five years	...	...	...	...	·08	·01	·05	·02	2·31	·24	4·25	·09	·61	·02	·11	·06	7·88	·48

In this table the actual Case-Mortality is shown, i.e., the actual Deaths occurring among the cases notified.

Year.	Smallpox.			Typhus Fever.			Enteric Fever.			Puerperal Fever.			Diphtheria, Membranous Group.			Scarlet Fever.			Erysipelas.			Cerebro-Spinal Fever.		
	Cases.	Deaths.	Per-centage of Deaths to Cases.	Cases.	Deaths.	Per-centage of Deaths to Cases.	Cases.	Deaths.	Per-centage of Deaths to Cases.	Cases.	Deaths.	Per-centage of Deaths to Cases.	Cases.	Deaths.	Per-centage of Deaths to Cases.	Cases.	Deaths.	Per-centage of Deaths to Cases.	Cases.	Deaths.	Per-centage of Deaths to Cases.	Cases.	Deaths.	Per-centage of Deaths to Cases.
1880	5	...	...	18	7	39.0	336	49	14.5	...	...	...	172	35	20.3	1,897	338	17.8	...	...	...	...	...	...
1881	4	...	...	23	14	60.8	413	47	11.3	...	...	...	171	37	21.6	1,904	257	13.4	...	...	...	...	...	...
1882	1	1	100.0	45	10	22.2	639	70	10.9	...	...	...	217	33	15.2	2,161	88	4.0	...	...	...	...	...	...
1883	...	...	...	50	16	32.0	346	42	12.1	...	...	...	214	34	15.8	1,817	85	4.6	...	...	...	...	...	...
1884	1	...	...	42	16	38.0	591	70	11.8	...	...	...	183	44	24.0	1,423	72	5.1	...	...	...	...	...	...
1885	12	...	...	58	10	17.2	589	62	10.5	...	...	...	149	43	28.8	1,087	28	2.5	...	...	...	...	...	...
1886	26	3	11.5	12	4	33.3	224	31	13.8	...	...	...	212	51	24.0	1,306	42	3.2	...	...	...	...	...	...
1887	...	...	...	38	11	28.9	332	38	11.4	...	...	...	256	57	22.2	2,587	145	5.5	...	...	...	...	...	...
1888	1	...	...	23	5	21.7	245	27	11.0	...	...	...	245	65	26.5	618	20	3.2	...	...	...	...	...	...
1889	...	...	...	46	9	19.5	320	32	10.0	...	...	...	354	98	27.1	1,253	29	2.3	...	...	...	...	...	...
1890	...	...	...	7	1	14.3	500	44	8.8	...	...	...	361	85	23.5	1,197	46	4.0	...	...	...	...	...	...
1891	...	...	...	1	...	...	445	42	9.4	...	...	...	207	48	23.1	979	49	5.0	...	...	...	...	...	...
1892	8	...	...	18	3	16.6	238	28	11.7	...	...	...	203	42	20.6	1,856	69	3.7	...	...	...	...	...	...
1893	51	1	1.9	6	1	16.6	274	36	13.1	...	...	...	251	62	24.7	1,629	49	3.0	...	...	...	...	...	...
1894	537	56	10.4	3	1	33.3	310	38	12.2	...	...	...	362	86	23.7	1,821	65	3.5	...	...	...	...	...	...
1895	109	16	14.6	...	...	...	417	54	12.9	...	...	...	314	65	20.7	2,832	65	2.2	...	...	...	...	...	...
1896	...	...	...	10	3	30.0	328	36	10.9	...	...	...	251	52	20.7	2,185	48	2.1	...	...	...	...	...	...
1897	...	...	...	3	1	33.3	254	24	9.4	...	...	...	214	44	20.5	2,597	93	3.5	...	...	...	...	...	...
1898	...	...	...	79	9	11.2	241	27	11.2	...	...	...	269	38	14.1	2,387	72	3.0	...	...	...	...	...	...
1899	...	...	...	12	3	25.0	289	39	13.4	...	...	...	279	28	10.0	1,185	50	4.2	...	...	...	...	...	...
1900	5	...	...	35	3	8.5	249	25	10.0	...	...	...	483	52	10.7	892	26	2.9	...	...	...	...	...	...
1901	6	1	16.6	14	2	14.3	215	30	13.9	...	...	...	542	58	10.7	892	26	2.9	...	...	...	...	...	...
1902	7	...	...	10	1	10.0	192	27	14.0	...	...	...	408	32	7.8	812	30	3.6	...	...	...	...	...	...
1903	5	1	20.0	1	...	...	237	22	9.2	...	...	...	575	59	10.2	1,415	53	3.7	...	...	...	...	...	...
1904	168	15	8.9	6	...	...	196	22	11.2	...	...	...	752	63	8.3	1,070	31	2.8	...	...	...	...	...	...
1905	2	...	...	1	1	100.0	210	20	9.5	...	...	...	674	61	9.0	832	15	1.8	...	...	...	...	...	...
1906	...	...	...	...	...	...	144	11	7.6	...	...	...	667	48	7.1	987	34	3.4	...	...	...	...	...	...
1907	...	...	...	1	...	...	103	11	10.6	...	...	...	635	32	5.0	1,110	24	2.1	...	...	...	...	...	...
1908	20	...	...	...	...	...	68	6	8.8	...	...	...	389	16	4.1	1,993	32	1.6	...	...	...	...	...	...
*1909	2	...	...	...	...	...	39	5	12.8	...	...	...	423	38	8.9	1,522	50	3.2	...	...	...	...	...	...
*1910	...	...	...	...	...	...	43	6	13.9	...	...	...	511	60	11.7	1,512	42	2.7	...	...	...	...	...	...
*1911	...	...	...	...	...	...	31	3	9.7	...	...	...	605	49	8.0	1,075	24	2.2	...	...	...	...	...	...
*1912	...	...	...	...	...	...	29	4	13.7	...	...	...	426	29	6.8	893	10	1.1	...	...	...	...	...	...
*1913	...	...	...	...	...	...	45	10	22.2	...	...	...	448	35	7.8	1,675	43	2.5	...	...	...	...	...	...
*1914	...	...	...	...	...	...	63	12	19.0	...	...	...	902	96	10.6	2,270	36	1.5	...	...	...	...	...	...
*1915	...	...	...	...	...	...	21	3	14.3	...	...	...	900	107	11.8	1,748	58	3.3	...	...	...	...	...	...
*1916	...	...	...	...	...	...	30	2	6.6	...	...	...	823	82	9.9	1,411	31	2.1	...	...	...	...	...	...
*1917	...	...	...	...	...	...	6	2	33.3	...	...	...	584	65	11.1	748	16	2.1	...	...	...	...	...	...
*1918	...	...	...	...	...	...	14	1	7.1	...	...	...	627	60	9.5	852	26	3.0	...	...	...	...	...	...
*1919	...	...	...	...	...	...	6	...	...	...	...	...	734	79	10.7	1,459	39	2.6	...	...	...	...	...	...

\* In these years the actual Case-Mortality is shown, i.e., the actual Deaths occurring among the cases notified, though taking place after 31st December.

Table showing the number of Cases of the undermentioned diseases admitted to Hospital since the year 1890  
and the percentage of admissions to total notifications in each year.

Years.	Smallpox.		Typhus Fever.		Enteric Fever.		Puerperal Fever.		Diphtheria, Mem- branous Group.		Scarlet Fever.		Erysipelas.	
	Admissions	Rate per cent. to Total Cases Notified.	Admissions	Rate per cent. to Total Cases Notified.	Admissions	Rate per cent. to Total Cases Notified.	Admissions	Rate per cent. to Total Cases Notified.	Admissions	Rate per cent. to Total Cases Notified.	Admissions	Rate per cent. to Total Cases Notified.	Admissions	Rate per cent. to Total Cases Notified.
1890	...	...	9	100·00	241	48·02			122	29·59	480	40·10		
1891	...	...	1	100·00	227	51·01			82	39·61	433	44·12		
1892	8	100·00	16	88·88	115	48·31			66	32·51	862	46·44		
1893	51	100·00	5	83·33	144	52·55			85	33·86	780	47·88		
1894	533	99·25	3	100·00	176	56·77			122	33·70	958	52·60		
1895	109	100·00	...	...	288	69·06			146	46·49	1519	53·63		
1896	...	...	10	100·00	233	71·03			108	43·02	1381	63·20		
1897	...	...	3	100·00	175	68·89			109	50·93	1658	63·84		
1898	7	100·00	78	98·73	143	51·03			111	41·26	1350	56·55		
1899	...	...	11	91·66	207	71·62			136	48·74	816	68·86		
1900	5	100·00	35	100·00	181	72·69			309	63·97	676	68·21		
1901	6	100·00	14	100·00	166	76·85			364	67·15	601	67·37		
1902	7	100·00	10	100·00	153	79·68	5	19·23	297	72·79	605	74·50	207	40·35
1903	5	100·00	...	...	214	90·29	...	...	429	74·60	1187	83·88	154	33·48
1904	170	100·00	6	100·00	174	88·77	1	7·14	579	76·99	942	88·03	136	38·52
1905	2	100·00	1	100·00	179	85·23	4	36·36	581	86·20	740	88·82	126	43·29
1906	...	...	...	...	132	91·66	7	63·63	589	88·30	880	89·15	146	43·32
1907	...	...	1	100·00	91	88·34	12	63·15	546	85·98	1026	92·43	152	50·66
1908	17	85·00	...	...	61	89·70	9	69·23	338	86·88	1882	94·43	133	51·15
1909	2	100·00	...	...	35	90·00	14	60·86	371	87·70	1442	94·74	108	52·17
1910	...	...	...	...	39	90·69	11	57·89	476	93·15	1423	94·11	91	43·54
1911	...	...	...	...	29	93·55	8	53·33	556	91·90	1007	93·67	131	54·35
1912	...	...	...	...	27	93·10	4	50·00	396	92·95	848	94·96	132	55·23
1913	...	...	...	...	41	91·11	8	44·44	416	92·85	1612	96·23	108	48·43
1914	...	...	...	...	56	88·88	12	70·59	856	94·90	2206	97·18	146	52·50
1915	...	...	...	...	19	90·47	8	50·00	883	98·11	1659	94·90	144	51·42
1916	...	...	...	...	28	93·33	10	52·63	797	96·84	1383	98·01	57	33·33
1917	...	...	...	...	5	83·33	11	50·00	567	97·08	727	97·19	74	46·25
1918	...	...	...	...	11	78·57	6	60·00	606	96·65	841	98·70	69	54·76
1919	...	...	...	...	6	100·00	7	36·84	716	97·54	1435	98·35	75	42·37

Not Notified  
until 1902.



## PHTHISIS.

In 1907 the notification of Phthisis became compulsory, and the following figures are interesting, as showing the notifications in each of the succeeding years, together with the incidence-rate per 1000 of the population :—

1907	-	-	-	-	651	or	2·0	per	1000
1908	-	-	-	-	713	„	2·2	„	„
1909	-	-	-	-	744	„	2·3	„	„
1910	-	-	-	-	763	„	2·3	„	„
1911	-	-	-	-	1052	„	3·3	„	„
1912	-	-	-	-	1255	„	3·8	„	„
1913	-	-	-	-	1010	„	3·1	„	„
1914	-	-	-	-	808	„	2·4	„	„
1915	-	-	-	-	690	„	2·1	„	„
1916	-	-	-	-	628	„	1·9	„	„
1917	-	-	-	-	655	„	1·9	„	„
1918	-	-	-	-	643	„	1·9	„	„
1919	-	-	-	-	602	„	1·7	„	„

All duplicate intimations and notifications relating to non-residents of Edinburgh have been carefully excluded from the above figures. On the other hand, notifications relating to Edinburgh citizens who may have been temporarily resident elsewhere, and whose illness had been notified to other authorities, have been included in the above Table.

The following report has been prepared by Dr John Guy, Tuberculosis Officer :—

I beg herewith to present a short report for the Tuberculosis Department for the year 1919.

**Staff.**—The members of the Department at present are :—

The Medical Officer of Health, Chief Administrative Tuberculosis Officer.

Dr John Guy, Chief Tuberculosis Officer.

Sir R. W. Philip, Consulting Tuberculosis Officer.

Dr Alexander James, Consulting Physician, City Sanatorium.

Dr H. C. Elder, Senior Assistant Tuberculosis Officer.

Dr Morris, Junior Assistant Tuberculosis Officer.

Dr Milne, Resident Medical Officer, Colinton Mains Sanatorium.

Dr Simson, Resident Medical Officer, Royal Victoria Hospital.

Dr James Miller, Pathologist.

Dr F. Hewat, Clinical Assistant at Farm Colony.

Attached to the Dispensary there are 6 visiting nurses, and there is the usual hospital staff in the sanatoria. Altogether there is in the Department a staff of 9 doctors (some part time and some full time) and 51 nurses.

**Accommodation.**—The total number of beds which we have available at the City's service for the treatment of Tuberculosis is distributed as follows :—

Colinton Mains Sanatorium	-	-	-	132	Ward Space
„	„	-	-	99	Open-Air Shelters
Royal Victoria Hospital	-	-	-	70	Beds
Polton Farm Colony	-	-	-	22	Beds

This gives us a total accommodation of 323. The number is not by any means too great when it is remembered that at this moment we have just over 1800 consumptives on the notification register. While the bed space is probably in excess of most cities in the kingdom, it should not be forgotten that the deaths from Tuberculosis equal, if they do not exceed, all the deaths from all other infectious diseases taken together.

In Colinton Mains Sanatorium we deal with all types of cases. In Royal Victoria Hospital we, unfortunately, are hindered by an agreement which for a certain definite time prevents us making use of it for anything except early cases, but this agreement lapses in approximately another year.

The ward accommodation for the more advanced cases is always much in demand, so much so that at times the necessity for more beds for this type of case is strongly impressed upon me. The demand for beds for the advanced and dying cases appears to me to be due to two main factors. In the first place, there appears to be an increasing tendency amongst the citizens to have the bed-fast cases removed to the institution, and particularly is this so in the case of the inhabitants of the smaller houses where there are young children.

This attitude, in my judgment, should be encouraged, as by removal we will undoubtedly prevent some of the children appearing at a later date as cases of Tuberculosis requiring treatment.

Tuberculosis is a disease requiring long views and wise judgments. At times we have to think rather of the next generation than the present when dealing with some of the problems presented.

In the second place, a demand on the ward space is made by the fact that we now deal with those patients who were formerly dealt with by the Poor Law Authorities. Many of these have no home, and have to be cared for during the remainder of their days.

There are other minor factors at work, but they need not be discussed.

**Notifications.**—During the year there have been notified to the Department 602 cases of Pulmonary Tuberculosis and 313 cases of Non-Pulmonary Tuberculosis. The Non-Pulmonary cases will be dealt with later in the report.

The age distribution of the Pulmonary cases is set out in the following Table :—

	Under 5.	5-10.	10-15.	15-20.	20-25.	25-30.	30-35.	35-40.	40-45.	45-50.	50-55.	55-60.	60-65.	65-70.	70 and over.	Total.
Male - -	6	11	10	24	36	30	31	42	30	28	24	8	14	6	10	310
Female - -	8	21	15	22	36	43	28	32	36	26	6	5	7	4	3	292
	14	32	25	46	72	73	59	74	66	54	30	13	21	10	13	602

The incidence of Phthisis in the several Wards of the City is shown in the following Table :—

Notifications. Rate per 1000.				Notifications. Rate per 1000.					
Calton	-	-	40	1·6	Broughton	-	-	30	1·7
Canongate	-	-	51	2·0	St Stephen's	-	-	27	1·4
Newington	-	-	16	·8	St Andrew's	-	-	24	1·1
Morningside	-	-	21	·8	St Giles	-	-	78	3·0
Merchiston	-	-	32	1·2	Dalry	-	-	36	1·4
Gorgie	-	-	52	2·3	George Square	-	-	52	2·1
Haymarket	-	-	16	1·0	St Leonard's	-	-	51	2·0
St Bernard's	-	-	21	1·2	Portobello	-	-	35	1·9
Notifications from Institutions, not allocated to Wards					-	-	20		

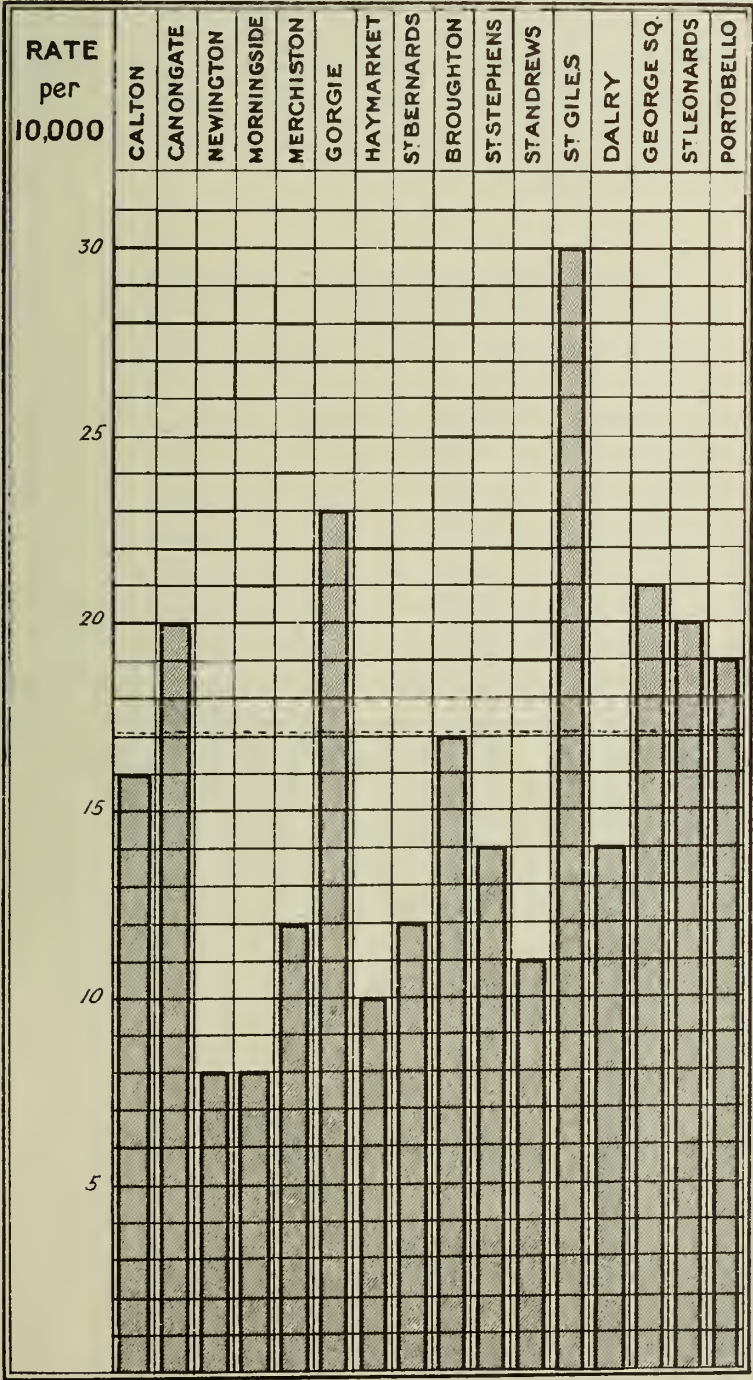
The homes from which the patients are notified are always of interest. The following Table shows the notifications in relation to the size of the house :--

1-roomed house.	2-roomed house.	3-roomed house.	4 rooms and over.	Lodging-Houses.	Institutions.	Total.
66	227	130	131	21	27	602

This simply emphasises the well-known fact that Tuberculosis falls most heavily amongst the poorer classes. The following Chart has been prepared in order that a comparison can be readily made as regards the incidence of Phthisis in the respective Wards in the City :—

PULMONARY TUBERCULOSIS.

NOTIFICATIONS PER 10,000 OF POPULATION.



----- Notification Rate for City.



I am unable to give any figures as to the stage of disease on notification. It appears to me inadvisable that each case notified should be visited by one of the Medical Staff for the mere purpose of classification when a private practitioner is already in attendance.

**Removals to Sanatorium of cases notified.**—Of the 602 cases notified during 1919, no fewer than 359 were removed to the various institutions.

I am able to report that no case was refused admission where it was thought institution treatment would be of any avail or where removal was necessary for general public health purposes. It is seldom that we have a waiting list, and the term of waiting for admission rarely exceeds two weeks. The rule is that we are always able to admit in a few days.

**Deaths.**—During the year there were 472 deaths from Tuberculosis, 320 from Pulmonary, and 152 from Non-Pulmonary forms of the disease.

It is most gratifying to record that this is the smallest number of deaths we have had in the City from Pulmonary Tuberculosis since death certification was introduced. It is all the more noteworthy, as the English death-rate from the disease has been on the increase during the years of war when ours has been steadily declining. This decline is a most encouraging fact. The figures since 1900 are set forth in the Table which I submit below.

Deaths from Tuberculosis, 1900-1919.

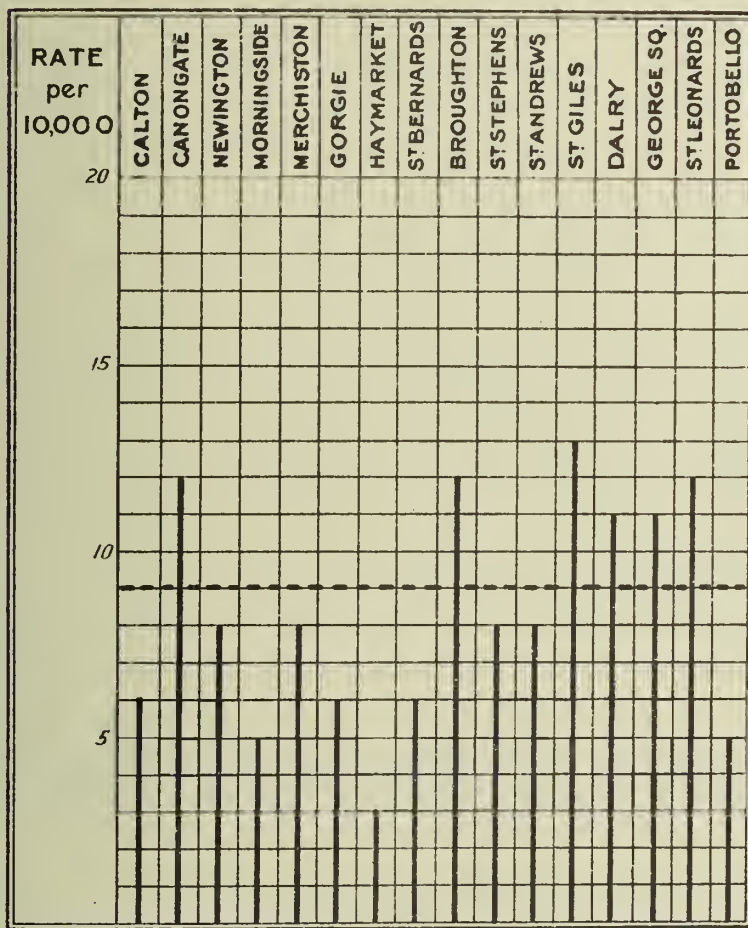
YEAR.	Pulmonary Tuberculosis.			Other Tuberculous Diseases.			All Tuberculosis.
	Male.	Female.	Total.	Male.	Female.	Total.	
1900	302	246	548	141	129	270	818
1901	284	241	525	148	129	277	802
1902	262	215	477	120	95	215	692
1903	244	223	467	114	117	231	698
1904	223	185	408	121	125	246	654
1905	232	206	438	109	93	202	640
1906	193	180	373	108	110	218	591
1907	203	192	395	123	100	223	618
1908	197	198	395	123	92	215	610
1909	251	177	428	90	103	193	621
1910	223	166	389	82	83	165	554
1911	211	181	392	101	92	193	585
1912	226	180	406	93	87	180	586
1913	186	178	364	84	91	175	539
1914	213	166	379	89	101	190	569
1915	193	179	372	92	69	161	533
1916	198	158	356	81	82	163	519
1917	201	190	391	100	84	184	575
1918	141	180	321	74	89	163	484
1919	161	159	320	70	82	152	472



The following line diagram shows in a graphic way the mortality experienced in each Ward, and in this way a comparison can at once be made with the death-rate for the City as a whole.

### DEATH RATE—PULMONARY TUBERCULOSIS.

PER 10,000 OF POPULATION.



----- *Death Rate for City.*

**Age Distribution.**—The following Table shows the age periods at which death took place and the distribution throughout the various Wards. 320 deaths were distributed as follows:—Males, 161; Females, 159.

Table showing the Phthisis Mortality by Wards and Age periods for the year 1919.

WARDS.	Number of Deaths.	Rate per 1000.	Sex.		Age Periods.								
			Male.	Female.	Under 15 years.	15 and under 20 years.	20 and under 25 years.	25 and under 35 years.	35 and under 45 years.	45 and under 55 years.	55 and under 65 years.	65 years and up- wards.	
Calton . . .	17	·6	7	10	1	1	2	5	3	2	2	1	
Canongate . . .	32	1·2	17	15	3	1	2	8	7	8	...	3	
Newington . . .	17	·8	6	11	1	...	3	3	5	...	2	3	
Morningside . . .	14	·5	8	6	1	...	2	4	4	1	...	2	
Merchiston . . .	20	·8	7	13	1	1	...	5	9	2	1	1	
Gorgie . . .	14	·6	7	7	1	1	2	2	4	2	2	...	
Haymarket . . .	6	·3	2	4	...	2	1	1	2	...	...	...	
St Bernard's . . .	11	·6	6	5	1	...	1	4	2	1	2	...	
Broughton . . .	21	1·2	9	12	...	3	1	6	4	4	3	...	
St Stephen's . . .	16	·8	11	5	...	2	3	5	3	1	1	1	
St Andrew's . . .	10	·8	9	1	1	1	1	2	1	3	1	...	
St Giles . . .	33	1·3	20	13	2	1	2	7	6	11	3	1	
Dalry * . . .	28	1·1	12	16	2	1	4	3	8	8	1	1	
George Square . . .	27	1·1	14	13	1	3	5	6	4	4	2	2	
St Leonard's . . .	32	1·2	16	16	2	3	1	7	8	6	4	1	
Portobello . . .	11	·5	3	8	5	...	1	4	...	...	1	...	
Institutions (other than Sanatorium) . . .	8	...	4	4	...	1	...	2	1	1	1	2	
Military Quarters . . .	3	...	3	...	...	...	2	1	...	...	...	...	
Total . . .	320	·9	161	159	22	21	33	75	71	54	26	18	

It is noteworthy that nearly half of the deaths take place between 25 and 45 years of age.

**Deaths in relation to Notifications.**—A point of much interest is the relationship in time of notification and death, and the following Table illustrates this well.

Notifications and deaths up to January 1920 from Pulmonary Tuberculosis.

Year.	No. of Cases notified.	No. of those known to have died.	Under 1 month.	From 1 to 3 months.	From 3 to 6 months.	From 6 months to 1 year.	From 1 to 2 years.	Over 2 years.	Notified after Death.	Un-known.
1914	808	406	37	71	52	46	61	63	70	6
1915	690	369	36	64	25	31	61	39	101	12
1916	628	343	48	64	37	36	54	26	73	5
1917	655	309	44	56	27	40	55	7	70	10
1918	643	269	38	57	35	41	20	...	70	8

It is noteworthy that nearly one-half of all the notified cases are dead in about two years after notification, and that about 50 per cent. of the deaths take place within one year after official notice of the illness has been given to the Department.

The following Table shows the deaths in 1919 in relationship to notification :—

Year.	Under 1 month.	From 1 to 3 months.	From 3 to 6 months.	From 6 months to 1 year.	From 1 to 2 years.	Over 2 years and under 3.	Over 3 years and under 4.	From 4 years upwards.	Notified after Death.
1919	31	54	28	34	45	22	8	27	71

**Notifications from Death Returns.**—I should like to direct special attention to the number of cases in which the first intimation we have of the presence of the disease is from the death returns.

The number, as will be seen from the Table, keeps with fair regularity about 70 per annum. This is not as it should be. It appears to me that it would be advisable to inquire of the certifying practitioner in every case at what time he first became aware of the existence of the disease.

It might also be in order to call the attention of the practitioners to the regulation made under Part IV. of the Public Health (Scotland) Act, 1897, which provides for the notification of Pulmonary Tuberculosis within 48 hours.

There need be no fear in the mind of the medical attendant who certifies as to "needless interference" by the officials of the Department, as where the doctor indicates that the patient or his friends can carry out the necessary preventive steps no visits are made. It is an axiom in the Department that unnecessary work should be avoided, and that visits are not to be made for the mere purpose of increasing statistics.

The fact that so many of our deaths occur in a comparatively short time after notification points to a real serious difficulty in the control and eradication of the disease. The fault is not to be attributed to the medical men as having failed to recognise the disease until it was in a stage too far advanced for treatment to be of any avail. The fault lies rather with the patients and their friends who have not consulted their doctor until the disease has reached a fatal stage. This is a serious handicap in the abolition of the disease, as nothing can remedy this but the gradual education of the population in the necessity for consulting a medical man whenever health begins to fail from any indefinite cause.

**Dispensary.**—The work at the Dispensary continues on the usual lines. The Institution is open every afternoon and every Thursday evening.

During the year the attendances were as follows :—

	New Cases.	Old Cases.
Male - -	513	2724
Female - -	404	1863
Children - -	684	2720
Total, <u>1601</u>		<u>7307</u>

The total number of domiciliary visits paid by the doctors and nurses was 14,315.



**Contacts.**—The examination of “contacts” continues. We examined during the year 354. Of this number 249 were classified as healthy, 49 as Tuberculous, and 56 as suspect. It is very difficult, and indeed at times quite impossible, to give a definite opinion as to whether a child is or is not actually suffering from Tuberculosis. The various tuberculin tests are of little or no positive assistance, as Tuberculous infection is so universal. The cases we classify as suspect are mainly those where the constitutional symptoms might be taken to indicate the presence of a tuberculous condition but where definite proof is lacking. The rule in dealing with suspects is to secure the attendance of the child at the Dispensary until the point is definitely settled.

**General Routine.**—Each of the six nurses has a separate district of the City to attend to and for which she is responsible. When a case is notified to the Department the name is transmitted to the nurse for the district in which the patient lives. When she visits she takes charge as far as possible of the hygiene of the home and inculcates the doctrine of “open air” and cleanliness. She also arranges for the other members of the household to be medically examined either by their own medical attendant or by one of the Dispensary Medical Staff. If the contacts can come to the Dispensary, the examination is conducted there, and if they cannot come then an appointment is made for the doctor to attend at the house. When a patient is removed to the Sanatorium or returns home from the Sanatorium, the nurse is always informed, so, in this way, she is kept in touch with her own particular patients. Once a week I meet all the Staff and get a Report from them as to the condition and environment of each case either notified or discharged from Hospital during that week. Whatever steps appear necessary, such as domiciliary treatment, medical attendance from the Dispensary, removal to Hospital, etc., are then decided on. Once a quarter each patient on the nurse’s list is reported upon either to the assistants or myself, and in this way an approximately continuous record is made of each patient.

**Care Committee.**—Where a patient appears to require pecuniary or other assistance, his case is transmitted to the Care Committee, when it is considered, and appropriate steps are taken to cope with and remedy the deficiency. Here I should like to express my indebtedness to those ladies who form the Care Committee for their valuable help.

**New Work—Complement Fixation.**—In conjunction with the staff at the Dispensary, I have spent considerable time in investigating the Complement Fixation test as a means of enabling us to determine definitely when a patient is or is not suffering from Tuberculosis. We used the antigen prepared by Dr Wang of the Royal College of Physicians Laboratory, and had the advantage of his supervision while carrying out the tests. Without entering into the details of this most intricate test, we, as clinicians, determined that its value for us was very slight indeed in its present stage. The cases we were quite clear about clinically, the test confirmed, but in the doubtful cases it was of little value. It failed at the crucial point.

**Therapeutics.**—We have also investigated and are continuing to investigate the value of new remedies introduced for the cure of the disease, but so far without any very brilliant results. Amongst those remedies we have employed a lipoid free tuberculin, a sensitised tuberculin, and a special emulsion of tubercle bacilli prepared by Dr MacGowan of the Royal College of Physicians Laboratory. We are using autogenous vaccines alone or combined with tuberculin, but up to date no very marked successes can be recorded. My own conviction deepens year by year that while we should examine every avenue which would seem to lead towards a cure, the greatest part of our energies should be directed towards prevention.



**Education.**—One great point in this is the education of the public in matters pertaining to the disease; how it is acquired and how it is spread: the value of fresh air, sunshine, good food, etc. In order to do this I am arranging, with the assistance of the ladies in the Care Committee, to have various courses of lectures given by the assistants and myself to the numerous Women's Societies in the City. By educating the housewives in this way and by persisting in it year by year I hope ultimately to reinforce, by the power of knowledge, the natural instincts of the mother for the preservation of the health of the family.

**Non-Pulmonary Tuberculosis.**—During the year there have been notified 313 cases of Non-Pulmonary Tuberculosis. The age distribution is shown under:—

	Under 5.	5-10.	10-15.	15-20.	20-25.	25-30.	30-35.	35-40.	40-45.	45-50.	50-55.	55-60.	60-65.	65-70.	70 and over.	Total.
Male . .	36	17	27	14	8	6	4	4	3	4	1	4	3	3	3	137
Female .	38	19	25	19	17	14	7	5	9	6	3	3	3	3	5	176
	74	36	52	33	25	20	11	9	12	10	4	7	6	6	8	313

As an indication of the economic status of the persons notified, I show the distribution of the cases as regards housing:—

1 Room.	2 Rooms.	3 Rooms.	4 Rooms and over.	Institutions.	Total.
16	112	80	83	22	313

The various organs affected are shown in the following Table, together with the deaths amongst them notified this year:—

	Notifications.	Deaths.
Glands—Cervical . . . . .	57	3
„ —other Glands . . . . .	13	3
Bone (except Spine) . . . . .	27	5
Spine . . . . .	21	8
Joints—Hip . . . . .	16	1
„ —Knee . . . . .	9	2
„ —Ankle . . . . .	3	—
„ —Elbow . . . . .	1	—
„ —Wrist . . . . .	2	—
Abdominal . . . . .	60	35
Meninges and Brain . . . . .	47	44
Kidney . . . . .	9	3
Genito-Urinary . . . . .	8	—
General . . . . .	27	24
Pyæmia . . . . .	1	—
Breast . . . . .	2	—
Tendon . . . . .	1	—
Skin . . . . .	9	2
Total . . . . .	313	130

It is noteworthy that such a large proportion of the cases notified should terminate fatally so soon. The distribution of the disease is interesting, showing the marked incidence of Abdominal Tuberculosis.

**Deaths.**—The deaths from the Non-Pulmonary forms of the disease numbered 130, and the age distribution was as follows :—

Under 5.	5-10.	10-15.	15-25.	25-35.	35-45.	45-55.	55-65.	65-75.	Over 75.	Total.
56	15	12	14	6	8	6	8	5	—	130

**Treatment.**—A fairly satisfactory accommodation is provided for those suffering from the Pulmonary variety of the disease, but no material provision is made for the Non-Pulmonary cases. I have recently submitted to you a special report on the necessity for a hospital for those patients where conservative treatment entailing a prolonged residence might be given. This report you placed before the Committee and active steps are being taken to provide such accommodation.

**Cost of work and its relation to results.**—The Anti-Tuberculosis Scheme is not carried out without cost. During the year 1918-1919 there has been expended a total of £29,320, made up chiefly as follows :—

Salaries	-	-	-	-	£7,077
Maintenance of Patients	-	-	-	-	17,335
Buildings	-	-	-	-	4,908

Of this amount only £10,770 has been borne by the City directly—the remainder having been contributed to by various bodies in the following proportions :—

Imperial Treasury	-	-	-	£10,664
Burgh Insurance Committee	-	-	-	3,345
Other outside Bodies	-	-	-	4,541

When it is considered that this expenditure was not incurred before the year 1912 and that since that year a total sum of £144,900 has been expended in the City, the question might very pertinently be asked : “Do the results justify this expenditure ?” In order to answer this question I wish to examine it under two heads :—

(1) The results as illustrated by the death-rate.

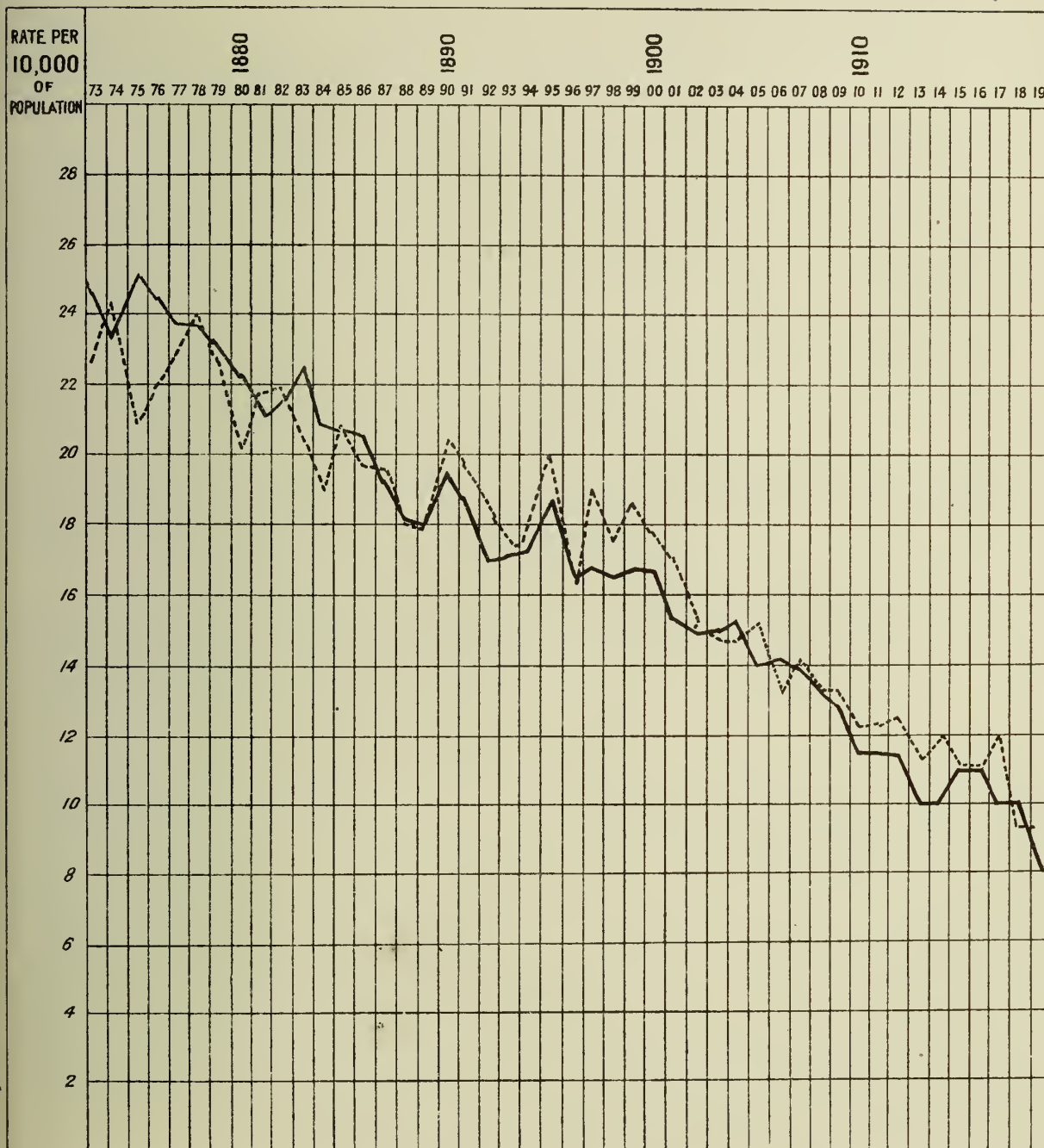
(2) The expense as a great humanitarian effort.

(1) The result of the expenditure as seen by the death-rate.—In order that this may be grasped clearly and that the case may be judged fairly, I submit a graph facing this page showing the death-rate from Pulmonary Tuberculosis in Scotland and in Edinburgh. The graph has been prepared by the Statistical Clerk.

It will be noted that from the year 1870 from some reason or other the death-rate began to fall and on the whole has continued to fall ever since.

Certain factors have been at work all over the land to produce this, and apparently these factors continued to work up to the year 1912. At that point there was a great outburst of activity all over the country of Anti-Tuberculosis Schemes, the result of the setting up of the Insurance Committees and of the Departmental Committee's Report on Tuberculosis.

PULMONARY PHTHISIS,  
DEATH RATE PER 10,000 OF POPULATION.



*Scotland* —      *Edinburgh* -----





As a result, in Scotland we have spent since 1912 the sum of £1,053,320 in dealing with Tuberculosis. We should naturally expect to see an increased downward tendency in the death-rate curve, but an examination shows that nothing of the sort has happened. It has continued to fall since 1912, just as it had done before 1912, so that one is compelled to state that, judged by the death-rate up to the present, the expenditure has produced no very evident result, and in spite of all our activities the rate continues to decline as before. While I have to confess this so far, I am firmly of opinion that the time is not yet ripe for pronouncing finally on the value of our Anti-Tuberculosis measures. In dealing with such a disease as Tuberculosis one has to remember the extreme chronicity of the illness, the prolonged periods which may elapse between the infection and the actual illness, so that seven years is altogether too short a period in which to judge the effects of the measures adopted.

(2) As a great amelioration effort I think the expenditure is more than justified and is quite in keeping with the humanitarian tendencies of the age. Let us consider for a moment what it means to a family in a small house to have a source of infection removed from the circle for a space of six or even three months; what it means for the dying patient to be comfortably cared for in the Hospital ward or to be carefully tended by the Tuberculosis Nurse in his own home; what it means to the family that the breadwinner should have a chance of recovery; or what it means to parents that a "delicate" child should have the advantage of a first-class sanatorium regime for a few months. Considering these points of view the expenditure is more than fully justified and the schemes should be prosecuted and expanded vigorously.

It might as reasonably be argued that Poor Law Hospitals are useless because they have failed to abolish pauperism as to consider Anti-Tuberculosis Schemes useless because up to now they have failed to abolish Tuberculosis.

Anti-Tuberculosis Schemes have their place with all those other factors which are rapidly making for the abolition of the disease, but their place, while important, is not so all-important as it is too commonly assumed to be.

I am,

Yours faithfully,

JOHN GUY,  
M.D., D.P.H. (Camb.), F.R.F.P. & S. Glas.,  
F.R.C.P. Edin.

## ENTERIC FEVER.

The notifications of this disease during 1919 numbered only 6. The same figure was recorded in 1917, and is the lowest in the annals of the City. In two of the six cases the patient had come to the City for treatment in a large general hospital, and, being subsequently diagnosed as suffering from Enteric Fever, was removed to the City Hospital.

In order to show the remarkable reduction which has taken place in the number of Enteric cases, the average number of notifications for each of the last four decennial periods is given below :—

1880-1889.	1890-1899.	1900-1909.	1910-1919.	1919.
403	329	165	28	6

While facilities for the diagnosis of this disease have been much improved during recent years, and the consequent early removal of patients to Hospital has been of incalculable assistance in preventing its spread, there can be no doubt that the improved sanitary appliances in the City and close supervision by the authorities have had much to do with the gradual elimination of this disease so far as the City is concerned.

It is also gratifying to report that in the course of the year not a single death of an Edinburgh citizen occurred from this disease. This is the first occasion on which such an announcement has been made with regard to Edinburgh—a circumstance which must be regarded as remarkable in a city with such a large population.

In considering the Hospital statistics it has to be pointed out that the patients removed to the City Hospital included those admitted by arrangement with the Corporation of Leith, and also naval and military patients from districts outwith the City.

In all, 41 patients were admitted as Enteric Fever or as “observation” for that disease. Only 15 of them, however, could be regarded as instances of Enteric infection. Of these 8 were classified bacteriologically as “typhoid,” 6 as “paratyphoid B,” and 1, a refugee from Russia, as “paratyphoid A.” One case terminated fatally, and there was some doubt about the diagnosis, the blood reacting to the paratyphoid B bacillus, but no clinical symptoms of the fever being present. The fatality rate was 6·6 per cent. Complications were few. Two patients (both paratyphoid B) suffered from hæmorrhage, and one, of the same variety of infection, from phlebitis. There was one instance of relapse in a patient in the “typhoid” group.

Of the 26 patients who did not suffer from Enteric, most were instances of gastro-intestinal influenza, while among the remainder were cases of tubercular disease, pneumonia, meningitis, and dysentery.

The following Table shows the Age and Sex of Enteric Patients (including those from other districts) treated in the City Hospital :—

AGE-PERIODS.		Under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	TOTAL.
Patients Recovered	{ Males .	1	...	...	3	4	1	...	...	9
	{ Females	...	1	...	2	2	...	...	...	5
Do. Died	{ Males .	...	...	...	...	...	...	...	...	...
	{ Females	...	...	...	...	...	...	...	1	1
Total . .		1	1	...	5	6	1	...	1	15

Hospital Death-rate 6·6 per cent.

## DIPHTHERIA.

The notifications of this disease numbered 734, which represents a ease-rate of 216 per 100,000 of the population, as compared with an average ease-rate of 231 per 100,000 for the previous five years. The number of deaths occuring during the year was 82, being equivalent to an annnal mortality of 24 per 1000 persons living.

The eases admitted to Hospital numbered 1002, including 716 Edinburgh patients, and 286 from Leith and other districts. Regarding these, the Resident Physician at the Hospital reports as follows :—

In all, 1264 patients were admitted to these Wards, and 1002 proved to be cases of Diphtheria. Of the remainder, 72 were “carriers” and 29 “contacts,” while 161 were instances of other conditions, such as tonsilitis, laryngitis, bronchitis, and broncho-pnenmonia.

The fatality-rate of the Diphtheria cases was about the same as in recent years, 9·3 per cent. The death-rate, both of the laryngeal and nasopharyngeal eases, was higher than usual. Sixty-eight patients suffered from post-diphtheritic paralysis, the percentage rate of this complication being 6·7, a very average figure.

The value of the early employment of anti-diphtheritic serum is shown by the higher mortality of those patients who came late under treatment.

Thus of 305 patients treated in the first two days of their illness, 4·2 % died ;

„ 421 „ „ third and fourth days of their illness, 8·3 % died ;

„ 162 „ „ fifth and sixth days of their illness, 15·4 % died ;

and „ 108 „ „ seventh day and after, 18·5 % died.

Similarly, as regards paralysis, those patients who received serum in the first two days of their illness had a percentage incidence of under 4 per cent., those in the second two days about 6 per cent., whereas when the first dose of serum was delayed until the fifth day or after, the percentage rose to 10 per cent. and over. Rashes, the result of the injections, were noted in 158 patients, or 15·8 per cent. of the whole. The reactions were in all cases mild, and only on very few occasions accompanied by fever or by joint pains.

The appended Table gives the Age and Sex of the 1002 Patients finally diagnosed as Clinical Diphtheria, "carrier" cases being excluded. The figures include patients from other districts.

AGE-PERIODS.		Under 1 year.	1 and under 2 years.	2 and under 3 years.	3 and under 4 years.	4 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 and under 70 years.	TOTAL.
Recovered	Males ...	2	7	22	24	41	159	67	33	23	3	2	...	1	384
	Females ...	4	7	24	34	29	195	87	46	72	16	8	1	1	524
Died ...	Males ...	4	5	5	...	4	21	2	1	1	1	...	...	...	44
	Females ...	4	5	7	4	8	18	2	...	...	1	1	...	...	50
Total ...		14	24	58	62	82	393	158	80	96	21	11	1	2	1002

Hospital Mortality 9·3 per cent.

## SCARLET FEVER.

The total number of cases notified in the City during 1919 was 1459, as compared with an average of 1405 for the preceding five years. This represents a case-rate for the year of '11 per 1000 of the population, which compares favourably with the average for the previous five years, viz. '09 per 1000.

Of the cases notified, 1435 were removed to Hospital, 1406 being treated at the City Hospital, and 29 at Portobello Hospital. There were also removed to the City Hospital 304 cases from other districts, making a total of 1710 admissions to this institution. Of these cases, 41 proved fatal, giving a percentage mortality of 2·3.

Only 45 cases were classed as "septic" and 10 as "toxic," the remainder being instances of the simple variety.

Of the principal complications, arthritis occurred in 3·7 per cent. of the patients, otorrhœa in 9 per cent., nephritis in only 1·4 per cent., whereas rhinitis was unusually frequent, no less than 15·3 per cent. of the cases presenting this complication.



Table showing the Age and Sex of Scarlet Fever Patients (including those from other districts) treated in the City Hospital.

AGE-PERIODS.		Under 1 year.	1 and under 2 years.	2 and under 3 years.	3 and under 4 years.	4 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and over	TOTAL.
Patients Recovered	{ Males ...	7	18	24	49	59	323	146	64	54	12	4	1	761
	{ Females ...	...	14	29	54	59	366	217	73	67	20	7	2	908
Died ...	{ Males ...	2	3	1	5	...	7	2	2	1	...	...	...	23
	{ Females ...	...	1	1	2	2	8	3	...	1	...	..	..	18
Total ...		9	36	55	110	120	704	368	139	123	32	11	3	1710

Hospital Death-rate 2·4 per cent.

ERYSIPELAS.

There were 177 cases of Erysipelas intimated during 1919, as compared with 126 in 1918 and 160 in 1917. Nine deaths occurred during the year, giving a death-rate of ·02 per 1000 of the population.

To the Hospital Wards 114 patients were admitted, of whom 101 were cases of Erysipelas, the remaining 13 suffering from septic cellulitis, osteomyelitis, erythema, and gangrene. The fatality-rate of the Erysipelas Patients, 8·9 per cent., was higher than usual, and two of the nine fatal cases were young infants. Eighteen of the patients, or nearly one-fifth of the whole, had suffered from one or more previous attacks. Relapses were not so common as in former years, only four instances occurring. In 91 instances the inflammation started in the face, in 9 in the lower extremity, and in 2 on the trunk.

Table showing the Age and Sex of Erysipelas Patients (including those from other districts) treated in Hospital.

AGE-PERIODS.		Under 5 years.	5 and under 10 years.	10 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 and under 70 years.	70 years and up- wards.	TOTAL.
Recovered	{ Males ...	2	...	2	2	12	10	3	2	...	33
	{ Females ...	6	2	5	7	9	13	7	4	6	59
Died ...	{ Males ...	...	...	...	...	1	2	...	1	1	5
	{ Females ...	3	...	...	...	...	...	1	...	...	4
Total ...		11	2	7	9	22	25	11	7	7	101

Hospital Death rate 8·9 per cent.

## MEASLES.

Measles was prevalent in the City during the year, and accounted for 62 deaths, all of which occurred among children under the age of five years, 18 being under one year, and 44 between one and five.

In all, 500 patients were admitted to the Measles Wards, and of these 482 proved to be suffering from Measles. Of these 49 died, the high mortality, 10·1 per cent., being due to the fact that a very high proportion of the patients were sent in because they were already suffering from complications. Broncho-pneumonia was, as usual, the principal cause of death. The complications may be tabulated as follows:—

Broncho-pneumonia	.	.	93 cases, or 19·2 per cent.
Otitis	.	.	32 „ 6·6 „
Adenitis	.	.	23 „ 4·7 „
Purulent Conjunctivitis.	.	.	32 „ 6·6 „
Enteritis	.	.	13 „ 2·6 „

Table showing the Sex and Age of Measles Patients (including those from other districts) treated in Hospital.

AGE-PERIODS.		Under 1 year.	1 and under 2 years.	2 and under 3 years.	3 and under 4 years.	4 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 years and over.	TOTAL.
Patients Recovered	Males ...	5	10	28	18	15	97	19	5	12	3	...	212
	Females ..	6	15	29	17	16	101	6	15	12	2	2	221
„ Died ...	Males ...	8	8	7	5	...	4	...	...	...	...	...	32
	Females ...	3	5	6	3	...	...	...	...	...	...	...	17
Total ...		22	38	70	43	31	202	25	20	24	5	2	482

Hospital Mortality, 10·1 per cent.

Table showing the Sex and Age of Rubella Patients (including those from other districts) treated in Hospital.

AGE-PERIODS.		Under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 years and over.	TOTAL.
Patients Recovered	Males ...	...	2	8	14	18	3	1	46
	Females ...	...	2	1	7	6	1	...	17
Total ...		...	4	9	21	24	4	1	63

## WHOOPING COUGH.

Whooping Cough was again present in the City during the year and 193 deaths were recorded, the distribution being as follows :—

1st Quarter, 110 deaths.	3rd Quarter, 10 deaths.
2nd     ,,       69     ,,	4th     ,,       4     ,,

As regards age incidence, 181 deaths were of children under the age of five years, and of these no fewer than 71 were infants under one year.

Of the 261 patients admitted to Hospital, 244 were classed as Whooping Cough, and of these 75 died, the percentage mortality being 30·7—a higher figure than we have hitherto had to report. It is, however, probable that many of the notified cases were in reality suffering from influenza, a disease which in young children is very difficult to distinguish from Whooping Cough. As, moreover, many of the fatal cases were admitted in a hopeless condition and died in a day or two after admission, and as the characteristic spasm of Whooping-Cough seldom occurs in moribund cases, it was quite impossible to come to a definite conclusion in many instances, and all that could be done was to accept the diagnosis of the notifying practitioner. In any case, influenza was certainly introduced into the wards and was, as a complication, responsible for many of the deaths.

The principal complications noted were as follows :—

Broncho-pneumonia	.	136 cases (always present on admission).
Convulsions	.	32   ,,
Prolapse of Rectum	.	4   ,,
Sub-conjunctival Hæmorrhage	.	2   ,,

Table showing Age and Sex of Whooping-Cough Patients (including those from other districts) treated in Hospital.

AGE-PERIODS.		Under 1 year.	1 and under 2 years.	2 and under 3 years.	3 and under 4 years.	4 and under 5 years.	5 and under 10 years.	10 and under 15 years.	TOTAL.
Patients Recovered	{ Males ...	12	12	17	11	5	16	1	74
	{ Females ...	10	20	20	23	2	20	...	95
„ Died ...	{ Males ...	11	14	4	1	2	...	1	33
	{ Females ...	4	19	6	8	...	5	...	42
Total ...		37	65	47	43	9	41	2	244

Case Mortality 30·7 per cent.

## CEREBRO-SPINAL MENINGITIS.

Fifteen cases of this disease were notified during 1919, including two cases which had been brought from country districts to one of the general hospitals for treatment, and which were subsequently diagnosed as suffering from Cerebro-Spinal Meningitis. There were seven deaths among Edinburgh citizens, and five of these were children under the age of five years.

Forty-three cases were admitted to Hospital under suspicion of being instances of this disease, but only 15 were finally recognised as such. The death-rate was heavy, only 6 patients recovering. This unsatisfactory result was due to the hopeless condition of many of the fatal cases at the time of their admission. For instance, four infants, all in the first year of life, had been ill more than a fortnight, two indeed for over six weeks, when they came under treatment, and serum injections are practically useless so late in the illness. Another fatal case, a soldier transferred from a Military Hospital in Dundee, had been suffering from the disease for six months, and of the remainder one case was fulminant and another moribund on admission. Thus seven out of the nine fatal cases had no chance of recovery when they were admitted to Hospital.

It was possible to determine the type of the infecting micro-organism in only seven cases. All four types were represented, two cases falling into the first group, two in the second, two in the third, and one in the fourth. This diversity of type shows how little connection the patients had with each other, the cases, in fact, being sporadic.

Among the 28 cases which proved not to be Cerebro-Spinal Meningitis were 3 patients suffering from encephalitis lethargica, 5 from pneumonia, 4 from pneumococcal meningitis, 4 from tubercular meningitis, 1 from influenzal meningitis, and 2 from meningitis of septic origin. There were also several instances of influenza and of unclassified encephalitis. Of these, all the meningitic cases were fatal.

Table showing Age and Sex of Cerebro-Spinal Meningitis Patients (including those from other districts) treated in Hospital.

AGE-PERIODS.			Under 1 year.	1 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	TOTAL.	
Recovered	{	Males	...	1	1	...	1	1	...	...	4	
		Females	...	...	...	1	1	...	...	...	2	
Died	{	Males	..	2	1	...	...	1	1	1	6	
		Females	...	2	...	...	...	1	...	...	3	
Total			...	4	2	1	1	2	3	1	1	15



## CHICKENPOX.

Twenty-six cases were sent in as Chickenpox, and 24 of these were in reality instances of this infection. There was one death from broncho-pneumonia which had existed before the onset of the Chickenpox.

Table showing Age and Sex of Chickenpox Patients (including those from other districts) treated in Hospital.

AGE-PERIODS.		Under 1 year.	1 and under 2 years.	2 and under 3 years.	3 and under 4 years.	4 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	TOTAL.
Males	...	1	2	1	1	6	3	...	2	3	1	20
Females	...	...	...	1	1	...	2	...	...	...	...	4
Total	...	1	2	2	2	6	5	...	2	3	1	24

## MUMPS.

Of 66 patients admitted 2 suffered from simple parotitis, the rest being cases of true Mumps. The only complication noted was orchitis, of which there were 7 instances, the percentage incidence among the 43 males of over fifteen years of age being 16.2, a slightly lower figure than in recent years. There were no deaths.

Table showing Age and Sex of Mumps Patients (including those from other districts) treated in Hospital.

AGE-PERIODS.			Under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	TOTAL.
Recovered	Males	...	1	2	...	13	20	10	...	46
	Females	...	1	...	3	5	6	2	1	18
	Total	..	2	2	3	18	26	12	1	64

## INFLUENZA.

During February and March wards were opened for this disease, which at that time was extremely severe. Only the worst cases, and those which it was, for some reason or other, impossible to look after in their own homes, were admitted. The pneumonic type of cases was as prevalent and as fatal as in the previous November. Of 379 admissions no fewer than 95, or 25 per cent., terminated fatally.

## OTHER DISEASES.

Eight patients were admitted suffering from Puerperal Fever, and three of these died. Fourteen cases of Ophthalmia Neonatorum were admitted, and two of these infants died from General Debility, otherwise the results of treatment were very good, the vision of nearly all the patients being unaffected. One case of Gonorrhœal Ophthalmia in an older child was also treated.

The following Table contains a Summary of the Laboratory Examinations at the City Hospital by the Medical Staff there during the Year 1919.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Examinations for B. Diphtheriae :—													
Total Examinations . . .	785	649	738	706	685	600	892	633	676	934	1147	1170	9615
Positive . . . . .	216	228	284	270	244	241	285	207	213	301	291	331	3111
Negative . . . . .	569	421	454	436	441	359	607	426	463	633	856	839	6504
Examinations of Blood for Widal's Re-action :—													
Total Examinations . . .	3	3	7	2	9	...	5	1	3	7	5	...	45
Positive . . . . .	2	2	3	1	8	...	2	1	3	4	3	...	29
Negative . . . . .	1	1	4	1	1	...	3	...	...	3	2	...	16
Examinations of C.S. Fluid for Meningococci :—													
Total Examinations . . .	13	10	17	30	9	7	8	12	2	6	4	...	118
Positive . . . . .	10	6	12	11	3	4	2	7	...	1	1	...	57
Negative . . . . .	3	4	5	19	6	3	6	5	2	5	3	...	61
Examinations of Nasopharyngeal Swabs for "Carriers" :—													
Total Examinations . . .	8	11	1	2	1	...	8	12	2	6	4	...	55
Positive . . . . .	4	4	...	...	...	...	2	7	...	1	1	...	19
Negative . . . . .	4	7	1	2	1	...	6	5	2	5	3	...	36
Examinations of Sputum for Tubercle Bacillus :—													
Total Examinations . . .	149	117	151	230	293	178	174	175	210	184	148	195	2204
Positive . . . . .	76	60	67	120	165	100	91	93	118	89	72	85	1136
Negative . . . . .	73	57	84	110	128	78	83	82	92	95	76	110	1068
Miscellaneous . . . . .	11	4	11	9	2	...	5	2	1	3	5	1	54

Making the Total for the Year . . . 12 091

# CITY HOSPITAL.

## REPORT BY RESIDENT PHYSICIAN.

I have the honour to submit the Annual Report of the City Hospital for the year 1919. As this is the first report issued since 1914, it may be not without interest to put on record here the work carried out by the Hospital during that time. It is perhaps not generally realised how much the Hospital was taken advantage of by the military and naval authorities. The large number of troops quartered in and near the City, the warships based on the Forth, including the American Squadron, the Grand Fleet on its often prolonged visits, and the numerous Colonial soldiers visiting Edinburgh on leave all depended on our wards for the treatment of their infectious diseases. As a result 2005 military and 848 naval patients were treated. In addition to this extra responsibility, we were obliged, when the Admiralty took over the Fever Hospital at East Pilton, to also admit all the infectious patients of Leith. It is gratifying to be able to report that all this increased amount of work was satisfactorily undertaken in spite of the difficulties caused by a depleted and constantly changing medical staff, and, at times, a shortage of experienced ward-sisters.

During the year 1919 there were admitted 5302 patients. The greatest number in Hospital on any one day was 868, and the daily average number was 582—an exceptionally high figure. During the autumn a considerable strain was put upon our accommodation by the Scarlet Fever epidemic, but it was nevertheless possible to carry on without very serious overcrowding. It is, however, in such times of stress that one regrets that so much accommodation has been given up to Tuberculosis. For instance, we were quite unable to deal with Measles during the winter and spring, and no disease is more destructive to life.

The health of the staff was, on the whole, excellent, although as usual a certain number of nurses contracted the diseases with which their duties brought them in contact. But, unfortunately, a large number suffered from Influenza, during the February epidemic, and we have to deplore the loss of two, one staff nurse and one probationer. It may be added that three nurses had died in the previous year from the same cause. I am glad to be able to report, however, that these fatalities, distressing as they were, did not discourage the nurses from doing their duty faithfully in the Influenza wards.

Temporary arrangements have been made to accommodate the increased number of nurses and maids rendered necessary by the shortening of working hours. How far such a shortening of time and duty, with the more frequent changes of nurses thereby entailed, will be to the advantage of the patients time alone will tell. It is to be hoped, however, that nurses will benefit and be less likely to break down during their course of training.

The usual examinations were held by the Scottish Board of Health, and 29 nurses, having successfully passed the tests, were awarded the Fever Nursing



Certificate of the Board. I have to acknowledge the great amount of trouble taken by the Assistant Matron, the Dispenser, the Home Sister, and the Resident Medical Officers in assisting the Matron and myself in the education of the probationers.

I conducted the usual classes for students. In all 179 attended the clinics and were divided into seven classes. Three classes were also held for graduates entering for Public Health Diplomas, and 23 ladies and gentlemen attended.

Throughout the year I have received the greatest assistance from our Consulting Physician, Dr James, who has always been ready to give us the benefit of his great experience in difficult and anxious cases, and who visits the Hospital daily. I must also express my indebtedness to Miss Thomas, whose work has been rendered very much more trying and exacting in recent years owing to the increasing difficulty of finding suitable persons for the nursing and domestic staffs. The Steward has been particularly helpful during the war and, but for his care and vigilance, expenses would have been infinitely greater. The Dispenser, Miss Bell, has continued to do excellent work in her beautifully kept department, and Miss Mackenzie and the kitchen staff successfully overcame the difficulty of catering for an unprecedented number of patients and staff. Good work, too, was done in the laundry, which has been often much understaffed. All the other officials have done well and I have been particularly indebted to Dr H. Mason Leete, who was my senior assistant during the year. Lastly, I must express my thanks to the ward-sisters, who, in my opinion, occupy the most important position in any Hospital, and whose care of the patients during a particularly trying year was beyond all praise.

I have the honour to be,

Sir,

Your obedient Servant,

CLAUDE B. KER, M.D.

The following Table shows the cost per occupied bed per annum in the City Hospital during the last six years. The particulars apply in each case to the financial year to 15th May.

Year to 15th May.	Daily Average Number of Occupied Beds.	* Cost of Food.	† Cost of Maintenance.	Total Cost of Occupied Bed per annum.
1914	469	£21 12 6	£44 0 8	£65 13 2
1915	596	21 0 0	34 9 9	55 9 9
1916	557	24 8 11	36 15 9	61 4 8
1917	497	31 16 0	43 1 10	74 17 10
1918	471	37 14 8	47 10 9	85 5 5
1919	521	40 1 0	55 2 2	95 3 2

\* Includes food for staff.

† Includes Salaries, Heating, Lighting, Upkeep of Buildings and Grounds, Taxes, etc.

The expenditure for Provisions is detailed below :—

Butcher Meat . . . . .	£4883 10 5
Fish, Fowls, etc. . . . .	3116 13 4
Butter, Cheese, and Bacon . . . . .	1227 14 1
Eggs . . . . .	1823 8 4
Groceries . . . . .	2466 0 7
* Milk . . . . .	4951 2 6
Bread . . . . .	1476 6 3
Oatmeal and Flour . . . . .	369 8 0
Potatoes and Vegetables . . . . .	425 7 7
Aerated Waters, etc. . . . .	128 7 4
	<u>£20,867 18 5</u>

\* The total quantity was 42,059 gallons, an average of 115 gallons per day, equal to  $1\frac{3}{4}$  pints per head per day.

The total cost of stimulants for the year amounted to £138, 11s. 0d., as against £90, 15s. 6d. in 1918, and was expended as follows :—

Diphtheria Patients . . . . .	£44 11 3
Influenza „ . . . . .	43 10 0
Scarlet Fever Patients . . . . .	17 12 8
Whooping-Cough Patients . . . . .	11 0 0
Measles Patients . . . . .	5 15 7
Enteric „ . . . . .	5 5 10
Phthisis „ . . . . .	4 7 0
Cerebro-Spinal Meningitis Patients . . . . .	3 16 4
Erysipelas Patients . . . . .	2 12 4
	<u>£138 11 0</u>

The cost of Serums during the year amounted to £498, 17s. 2d.

## VENEREAL DISEASES.

The Corporation's scheme for the treatment and prevention of Venereal Diseases was inaugurated on 1st March 1919, and in regard to it the following report has been prepared by the Clinical Medical Officer:—

I have the honour to submit a report of work done under the Venereal Diseases Scheme from 1st March 1919 to 31st December 1919.

Under the Provisions of the Public Health (V.D.) Regulations (Scotland), 1916, made by the Local Government Board for Scotland on 26th October 1916, the Corporation, as the Local Authority under the Public Health (Scotland) Act, 1897, for the City and Royal Burgh of Edinburgh, prepared a Scheme for the treatment of persons affected with Venereal Diseases and for preventing the spread of these diseases.

The Managers of the Royal Infirmary, Edinburgh, were approached, and arrangements were come to for treatment in that Institution of male and female patients. Mr W. J. Stuart, Assistant Surgeon, Royal Infirmary, was appointed to take temporary charge of this Department pending the demobilisation of Colonel L. W. Harrison, D.S.O., K.H.P., etc., etc., and Dr M. Liston, Clinical Assistant in the Female Department.

An arrangement was also come to with the Managers of Bruntsfield Hospital for Women to treat female cases, with the Royal Maternity Hospital to undertake the treatment of ante-natal cases, and outdoor clinics were opened at Windsor Street and Grove Street Dispensaries. Arrangements for the pathological work in connection with the clinics were entered into with the Managers of the Royal Infirmary and with the Royal College of Physicians Laboratory.

During the year the Edinburgh Corporation completed Agreements whereby the following Local Authorities outside the jurisdiction of the Corporation could take advantage of the Scheme, viz., Haddington, Eastern District of the County of Haddington; Western District of the County of Haddington, Cockenzie, Dunbar, East Linton, North Berwick, Prestonpans, Tranent; and with the Peeblesshire Venereal Diseases Joint Committee, which includes the County of Peebles, and the Burghs of Peebles and Innerleithen.

The larger portion of the work has been dealt with at the Royal Infirmary, and from the opening of the Clinic in March 1919, as will be seen from the monthly returns, the number of new cases and of attendances respectively has increased from 226 and 546 in March, to 280 and 3437 in December. The number of new patients reporting monthly and the number of times which they have come for treatment have fully justified the taking up of this branch of Public Health work by the Corporation.

In June 1919 Colonel Harrison was appointed Adviser to the English Ministry of Health on Venereal Diseases before being able to take up his duties as Clinical Medical Officer in charge of the Department, and in September I had the honour to be appointed in his place. With the increase in the amount of work following on the large number of patients who took advantage of treatment, it was found necessary to appoint Mr R. C. L. Batchelor, M.B., F.R.C.S.E., as Assistant Clinical Medical Officer.



A wardmaster and four orderlies, with special training in the treatment and nursing of Venereal patients, were also appointed, and the female nursing staff increased. The buildings set apart for the work at the Royal Infirmary were found insufficient to cope with it, and arrangements are now being made for extensions and alterations to both the Male and Female Departments, and for the provision of an additional Out-Patient Department for Men. The Royal Infirmary has not available any more beds for In-Patient treatment, and it will be necessary in the near future to consider what means can be taken to provide further accommodation of this type for both male and female cases.

In spite of the large numbers availing themselves of the treatment, not only from Edinburgh and district but from the whole of the East of Scotland, a considerable number of sufferers are not as yet availing themselves of the treatment facilities, while, at the same time, a large number of those who do report for treatment do not continue to attend a long enough period to enable one to guarantee with certainty that they are cured. The spread of knowledge concerning Venereal Diseases, and of the after-effects of these diseases and the importance of prolonged treatment, will help to remedy this. This work is being taken up by the local branch of the National Council for Combating Venereal Diseases, with the support of the Public Health Authority. Improved and more suitable accommodation at the clinics will also assist, and since the clinics have been opened at suitable evening hours the continuation of attendance for treatment has improved.

The incidence of the diseases, Gonorrhœa and Syphilis, is almost equally distributed. In both cases patients do not report themselves for treatment at the earliest periods of the disease, when the conditions are most favourable for treatment and most easily curable. This is particularly noticeable in Syphilis, and is due, no doubt, to the lack of teaching on these subjects which Graduates in Medicine receive during their course at the University. The medical attendant in the majority of cases waits for the appearance of the secondary rash and a Positive Wassermann Test before sending the patient for treatment. In Gonorrhœa it is more often due to the patient himself trusting to quack medicines and remedies, in the hope that the condition will be cleared up by them. Delay in commencing satisfactory treatment is disastrous in both cases, in that it lengthens the period of attendance necessary for cure and makes the cure more uncertain. In addition to this, it makes the treatment a longer and thus a more expensive one from the point of view of the Local Health Authorities. The Scottish Board of Health have advocated the teaching of the methods of treatment to Medical Practitioners; it would serve a better purpose and greatly lessen the expenditure in connection with the scheme if they would advocate and insist on practitioners becoming acquainted with the later methods of early diagnosis of both conditions, and give to them easy facilities for acquiring this knowledge. Accurate and early diagnosis, clinically and bacteriologically, is essential to effective treatment, and until a larger number of cases are under treatment in the earlier stages, which are the contagious and most infective periods, the progress in eradicating both diseases will not be so rapid as it might otherwise be.

I have the honour to be,

Sir,

Your obedient Servant,

DAVID LEES, D.S.O., M.B., F.R.C.S.E.



Return relating to persons residing in the Burgh of Edinburgh and surrounding districts who were treated in the V.D. Clinic, Royal Infirmary, Edinburgh, from 1st March 1919 to 31st December 1919 :—

							Males.	Females.
1. Number of persons dealt with at or in connection with the Out-Patient Clinic for the first time and found to be :—								
Suffering from Syphilis ... ..							573	352
" " Soft Sore ... ..							202	3
" " Gonorrhœa ... ..							777	60
" " no V.D. ... ..							104	46
							<u>1656</u>	<u>461</u>
2. Total attendances of all persons at the Out-Patient Clinic who were :—								
Suffering from Syphilis ... ..							3486	2479
" " Soft Sore ... ..							750	22
" " Gonorrhœa ... ..							5197	989
" " no V.D. ... ..							171	106
							<u>9604</u>	<u>3596</u>
3. Aggregate number of "In-Patients days" of treatment given to persons :—								
Suffering from Syphilis ... ..							1775	1905
" " Gonorrhœa ... ..							1230	384
							<u>3005</u>	<u>2289</u>
4. Number of persons treated with Salvarsan Substitutes ... ..								
							573	352
							80 Prov.	20 Prov.
							<u>653</u>	<u>372</u>
5. Number of Doses of Salvarsan Substitutes given :—								
Name of Drug.						Dose.		
Novarsenobillon ... ..						·3	55	7
" ... ..						·45	716	689
" ... ..						·6	1083	555
" ... ..						·75	—	430
" ... ..						·9	984	—
							<u>2838</u>	<u>1681</u>
6. Examination of Pathological Material :—								
Specimens from persons attending at Treatment Centre which were examined at this Centre for :—								Number.
Detection of Spirochaetes ... ..								356
" Gonococci ... ..								946
Wassermann Re-action ... ..								1848
Others ... ..								59
								<u>3209</u>

Attendances at Royal Infirmary Clinics from 1st March 1919 to 31st December 1919 :—

				MALES.		FEMALES.	
				New Cases.	Attendances.	New Cases.	Attendances.
<i>March</i>	—Edinburgh	...	...	98	208	60	182
	Country	...	...	53	96	15	60
					19 Daily Av.		20
<i>April</i>	—Edinburgh	...	...	69	224	30	192
	Country	...	...	63	128	10	72
					22		22
<i>May</i>	—Edinburgh	...	...	103	272	36	261
	Country	...	...	57	160	26	84
					27		24
<i>June</i>	—Edinburgh	...	...	81	304	25	202
	Country	...	...	66	192	17	72
					31		22
<i>July</i>	—Edinburgh	...	...	105	368	27	238
	Country	...	...	58	224	17	84
					37		26
<i>August</i>	—Edinburgh	...	...	97	432	17	248
	Country	...	...	81	240	18	84
					42		27
<i>September</i>	—Edinburgh	...	...	91	496	31	288
	Country	...	...	70	272	12	96
					48		32
<i>October</i>	—Edinburgh	...	...	101	960	31	324
	Country	...	...	58	504	7	108
					61		36
<i>November</i>	—Edinburgh	...	...	105	1060	19	360
	Country	...	...	72	617	11	108
					70		39
<i>December</i>	—Edinburgh	...	...	141	2047	38	432
	Country	...	...	87	800	14	158
					102		49
<b>TOTALS</b>	—Edinburgh	...	...	991	6371	314	2670
	Country	...	...	665	3233	147	926
				1656	9604	461	3596

New Male Cases attending Royal Infirmary Clinics :—

EDINBURGH.

1919.	Syphilis.	Gonorrhoea.	Soft Sore.	No V.D.	Total.
March ...	37	41	18	2	98
April ...	23	35	10	1	69
May ...	40	44	11	8	103
June ...	24	47	2	8	81
July ...	33	55	12	5	105
August ...	23	49	16	9	97
September ...	20	50	16	5	91
October ...	24	61	11	5	101
November ...	28	49	21	7	105
December ...	60	67	3	11	141
Totals ...	312	498	120	61	991

## New Male Cases attending Royal Infirmary Clinics :—

				COUNTRY.				
1919.				Syphilis.	Gonorrhœa.	Soft Sore.	No V.D.	Total.
March	...	...	...	21	23	7	2	53
April	...	...	...	24	24	14	1	63
May	...	...	...	27	25	4	1	57
June	...	...	...	21	33	10	2	66
July	...	...	...	22	24	10	2	58
August	...	...	...	26	37	9	9	81
September	...	...	...	12	35	13	10	70
October	...	...	...	20	25	7	6	58
November	...	...	...	39	25	5	3	72
December	...	...	...	49	28	3	7	87
Totals				261	279	82	43	665

## New Female Cases attending Royal Infirmary Clinics :—

				EDINBURGH.				
1919.				Syphilis.	Gonorrhœa.	Soft Sore.	No V.D.	Total.
March	...	...	...	44	3	1	12	60
April	...	...	...	22	...	1	7	30
May	...	...	...	27	7	...	2	36
June	...	...	...	16	4	...	5	25
July	...	...	...	19	6	...	2	27
August	...	...	...	14	2	...	1	17
September	...	...	...	23	7	...	1	31
October	...	...	...	25	4	...	2	31
November	...	...	...	16	2	...	1	19
December	...	...	...	26	9	...	3	38
Totals				232	44	2	36	314

## New Female Cases attending Royal Infirmary Clinics :—

				COUNTRY.				
1919.				Syphilis.	Gonorrhœa.	Soft Sore.	No V.D.	Total.
March	...	...	...	15	...	...	...	15
April	...	...	...	10	...	...	...	10
May	...	...	...	22	1	...	3	26
June	...	...	...	11	5	1	...	17
July	...	...	...	11	4	...	2	17
August	...	...	...	15	2	...	1	18
September	...	...	...	10	1	...	1	12
October	...	...	...	7	...	...	...	7
November	...	...	...	9	1	...	1	11
December	...	...	...	10	2	...	2	14
Totals				120	16	1	10	147

Number of Specimens examined at the Pathological Department, Royal Infirmary, Edinburgh, from 1st March 1919 to 31st December 1919 :—

1919.				Wassermann.	Dark Ground.	Smears.	Others.	Total.
March	...	...	...	91	6	21	2	120
April	...	...	...	108	10	25	1	144
May	...	...	...	162	40	47	12	261
June	...	...	...	148	31	65	9	253
July	...	...	...	170	34	63	5	272
August	...	...	...	153	37	51	1	242
September	...	...	...	208	28	42	1	279
October	...	...	...	212	15	96	1	324
November	...	...	...	256	82	214	...	552
December	...	...	...	340	73	322	27	762
Totals				1848	356	946	59	3209

Number of Cases (Female) treated at the Bruntsfield Hospital for Women, Whitehouse Loan, Edinburgh, from 1st March 1919 to 31st December 1919.

Of the 248 Cases attending there were found suffering from :—

Gonorrhœa	...	...	...	...	78
Syphilis	...	...	...	...	170
Total					<u>248</u>

DAVID LEES, D.S.O., M.B., F.R.C.S.E.,  
*Clinical Medical Officer.*



## BACTERIOLOGICAL EXAMINATIONS AT USHER INSTITUTE.

The following Table shows the number of specimens submitted for Bacteriological examination, and reported on by the Usher Institute of Public Health under agreement with the University authorities.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
For Tubercle :—													
Number of Examinations -	62	60	60	67	70	50	34	62	35	70	51	66	687
Positive - - -	10	7	10	6	18	10	5	11	11	18	8	13	127
Negative - - -	52	53	50	61	52	40	29	51	24	52	43	53	560
For Enteric :—													
Number of Examinations -	5	4	2	2	4	6	2	2	4	1	...	2	34
Positive - - -	...	2	1	...	1	...	...	1	...	...	...	...	5
Negative - - -	5	2	1	2	3	6	2	1	4	1	...	2	29
For Diphtheria :—													
Number of Examinations -	257	208	218	150	201	308	304	178	282	414	497	736	3753
Positive - - -	25	21	28	14	21	23	33	23	34	53	55	82	412
Negative - - -	232	187	190	136	180	285	271	155	248	361	442	654	3341
											Total	-	4474

## DISINFECTION.

Particulars as to the disinfection of Dwelling-houses, Hotels, etc., during the last three years are given in the Table below.

	1917.		1918.		1919.	
	Number.	Apart-ments.	Number.	Apart-ments.	Number.	Apart-ments.
Dwelling-houses, Hotels, etc. :—						
After Tuberculous Diseases ...	908	1,134	960	1,203	827	945
„ other „ ...	4,043	8,131	3,945	11,974	4,778	9,825

The articles removed last year from the above dwellings for steam disinfection are detailed in the next Table.

Description.	No. of Articles.		Description.	No. of Articles.	
	After Tuberculous Diseases.	After Other Diseases.		After Tuberculous Diseases.	After Other Diseases.
Mattresses and Palliasses ...	707	7,246	Body Clothes ...	962	71,363
Blankets, Sheets, Quilts, etc.	3,356	44,146	Carpets and Rugs ...	12	476
Beds, Pillows, Bolsters, etc.	2,052	10,549	Miscellaneous ...	27	37,501
Curtains, Table Covers, Wraps, etc. ...	258	1,827	Destroyed by request	128	45
Table Napery, Toilet Covers, Towels, etc. ...	102	1,312	Total ...	7,594	174,465

## RECEPTION HOUSE.

During the year 1197 persons were dealt with at the Reception House, which is in connection with the Disinfecting Station. Of this number, 34 adults and 560 children suffering from "Scabies" attended for the purpose of getting baths and having clothing disinfected. Verminous persons to the number of 603 were also treated.

## CITY MORTUARY.

During the year 126 bodies were removed to the Mortuary at a cost to the Local Authority of £12, 9s.

The following Table shows the number removed to the Mortuary during the last six years, together with the expenditure incurred in connection therewith.

Year.	Number.			Cost of Removal.
	Males.	Females.	Total.	
1914	98	52	150	£5 3 6
1915	96	51	147	7 8 6
1916	112	41	153	5 9 0
1917	90	55	145	10 12 0
1918	74	40	114	16 0 0
1919	82	44	126	12 9 0

## INTERMENTS UNDER THE PUBLIC HEALTH ACT.

Application was made in 77 instances where the relatives of deceased persons represented their inability to meet the expenses of burial. On inquiries being made by the Department as to the *bona fides* of the applicants, it was found that 2 of the deceased persons had been in receipt of parish relief; 10 of the other applicants had sufficient means; and in 2 cases the applications were withdrawn.

The funerals of the remaining 63 deceased persons—45 adults and 18 children—were provided for by the Department, at a net cost of £131, 14s. 3d.

Appended is a Table showing the total expenditure in connection with the removal of bodies and interments during the last six years.

Year.	Number.	Total Cost of Interments and Removals.	Sums Recovered from Relatives.	Net Expenditure.
1914	101	£126 0 0	£5 1 3	£120 18 9
1915	71	128 13 0	10 5 11½	118 7 0½
1916	61	132 6 0	23 8 6	108 17 6
1917	61	141 6 0	16 6 8	124 19 4
1918	72	201 6 6	14 1 0	187 5 6
1919	63	177 12 0	33 8 9	144 3 3





## PART II.

### ADMINISTRATIVE.

Reports relating

to

Inspection of Dairies, Ice-Cream Shops,  
Workshops, Bakehouses, and Hairdressing-Saloons,

and the administration

of the 'Shops' Act and 'Food and Drugs' Acts.



## DAIRIES.

As in former years the utmost thoroughness has been observed in supervising dairy shops and the milk supply generally throughout the City. In the course of the year under report, 373 dairies and shops where milk was retailed came under the Inspector's review, and to these no fewer than 2387 visits were made. On another page will be found a table showing the distribution of dairies in the various wards, with the visits made and the improvements effected.

In 59 cases premises were ordered to be papered and painted, and as a general rule dairy-keepers seemed impressed with the importance of maintaining the high standard of cleanliness which the regulations demand. After the many years in which stringent supervision has been in force, it is found that a warning is generally sufficient to secure the removal of any irregularity or laxity.

At the end of the year there were 356 dairy-keepers on the register, which represents a decrease of 16 for the twelve months. For several years back there has been a continuous decrease in the number of dairy shops—as a matter of fact, in six years the number has dropped by nearly 20 per cent. This is primarily due to the fact that during the war years small traders experienced difficulty in obtaining supplies of their stock-in-trade, apart from milk, and had consequently to go out of business. The tendency in recent years has been for the milk trade to become in an increasing measure centralised in the hands of one or two large firms—a circumstance which, apart from the economic aspect of the case, simplifies the problem of supervision.

While in the large establishments the milk supply is distributed under conditions which leave little to be desired, the great majority of City dairy-keepers are content to regard milk as merely a side-line in their business. The retailing of milk along with other commodities of a multifarious nature involves a risk of contamination, and it is to these smaller shops that the attention of the Inspector is chiefly directed.

Statistics relating to the source of the City's milk supply reveal the fact that cows housed in City byres are a rapidly dwindling number, and increasing quantities of milk are consequently being imported from country districts. In 1912 there were 2318 cows in City byres, while in 1919 there were only 1437—a reduction which seems to indicate that cow-feeders have been finding the industry a difficult one on economic grounds. During 1919 the cows in City byres only provided 27 per

cent. of the daily milk supply in the City, as compared with a 42 per cent. yield in 1912. This means that well nigh three-fourths of the City's supply come by road or rail from country districts each day.

As to the consumpt of milk, statistics show that a big decrease has taken place as compared with pre-war years. In 1912 the City's consumpt was 16,277 gallons, and in 1919, 12,932 gallons per day. The prevailing high prices are, of course, chiefly responsible for the drop in gallonage, and it appears that many people are resorting to tinmed and powdered substitutes for cow's milk.

Table showing the Distribution of Dairies, the Visits paid, and Results.

	I. Calton	II. Canongate	III. Newington	IV. Morningside	V. Merchiston	VI. Gorgie	VII. Haymarket	VIII. St Bernard's	IX. Broughton	X. St Stephen's	XI. St Andrew's	XII. St Giles'	XIII. Dairy	XIV. George Square	XV. St Leonard's	XVI. Portobello	TOTAL
Dairy-keepers on Register at beginning of year	32	21	24	27	27	22	17	13	21	27	10	22	31	31	31	16	372
Number added ...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Number given up ...	3	1	2	...	...	...	1	...	2	1	...	1	1	2	2	1	17
Businesses transferred ...	3	3	2	3	5	3	2	2	1	5	1	3	1	2	...	1	37
Dairy-keepers on Register at end of year ...	29	20	22	27	27	22	16	13	20	26	10	21	30	29	29	15	356
Other Dairy - keepers registered from beyond the City ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Number of visits paid ...	190	140	159	172	180	136	96	91	140	182	70	136	210	193	187	105	2387
Premises ordered to be papered and painted	6	7	2	4	3	3	6	4	3	2	2	3	5	4	4	1	59





## WORKSHOPS.

Inspection of workshop premises throughout the City was carried out with customary thoroughness during the year. At the close of the period there were 1072 Workshops on the Register, and the number of visits made by the Inspector was 1041. A Table showing the distribution of workshop premises over the various Wards of the City, together with the improvements effected in the course of the year, is given on page 71.

As will be seen from the Table, the principal irregularity calling for attention was that of dirty premises. In 144 cases, premises were ordered to be lime-washed, and as a general rule this was carried out with promptitude. In City workshops there appears to be an increasing regard for the principles of hygiene, and it is generally acknowledged that clean, orderly, and well-ventilated premises not only promote health and contentment among workers, but indirectly make for efficiency and better output. The stimulating effect of systematic inspection appears to have been very beneficial.

Employers of outworkers are required by law to furnish, twice a year, a list of the persons so employed by them. This enables the Inspector to visit homes and satisfy himself that working conditions are in order. Undernoted are particulars relating to outworkers,—most of whom, it may be added, are engaged in the making of wearing apparel :—

Lists received twice a year	...	...	...	...	28	} Number of Lists
Lists received once a year	...	...	...	...	12	
Outworkers	...	...	...	...	207	
Addresses of Outworkers received from other Authorities	...	...	...	...	4	
Complaints received from H.M. Inspector, as remediable under the Public Health						
Acts, but not under the Factory Act (S. 5)	...	...	...	...	...	48
Complaints received from the general public	...	...	...	...	...	4

Table showing the visits paid to Workshops and the Improvements effected.

	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XI.	XII.	XIII.	XIV.	XV.	XVI.	Total.
	Calton	Canongate	Newington	Morningside	Merchiston	Gorgie	Haymarket	St Bernard's	Broughton	St Stephen's	St Andrew's	St Giles?	Dalry	George Square	St Leonard's	Portobello	
Number of Workshops	57	32	34	48	59	25	81	27	55	53	237	144	38	97	59	26	1072
Number of Visits paid	57	32	34	48	59	26	83	27	56	54	198	145	40	97	59	26	1041
Premises found dirty, and subsequently limewashed	15	5	7	9	9	5	14	7	5	5	21	18	5	8	6	5	144
Premises where accumulations of refuse, etc., were found	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Sanitary Conveniences foul or neglected	1	1	...	3	2	1	1	1	...	...	1	1	3	2	2	...	19
Water-closets provided, or access arranged	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Water-closets improved or apparatus renewed	...	...	...	...	...	...	1	...	1	1	1	...	...	...	...	1	5
Sinks improved or removed	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ventilation of Workshops improved	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Lighting facilities increased	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Ceilings, walls, and floors of Workshops repaired	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2
Floors of Laundries, etc., drained or repaired	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smell from Gas-escapes	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Fumes from Heating appliances (hoods supplied)	1	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	3
Premises vacated as unsuitable	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Workshops without Abstracts reported to H.M. Inspector	1	1	...	...	...	...	2	...	...	...	...	...	...	...	...	...	4
Overcrowding	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

## BAKEHOUSES.

At the beginning of 1919 there were 149 Bakehouses on the Register. During the year, 9 were added and 1 was closed, leaving a total of 157 bakehouse premises on the City list. A periodic scrutiny was made by the Inspector with the object of maintaining the high standard of cleanliness so desirable in premises where bread is made. In 57 cases the bi-annual lime-washing was found to be over-due or otherwise unsatisfactory, while dirty floors and accumulations of refuse called for attention in 15 instances. In all of these immediate remedies were exacted.

A Table is given on page 73 showing the distribution of bakehouses in the various Wards of the City, and the improvements effected.

## HAIRDRESSING SALOONS.

There were 141 Hairdressing Saloons on the Register at the end of 1919. Of these, 94 hold the Certificate issued by the Public Health Department, certifying the fulfilment of certain recommendations relating to premises, equipment, and precautions, while 47 are uncertified. In regard to the latter group, it is noted that, while they have not secured the Department's Certificate, a considerable improvement has taken place in their condition as compared with former years.

Undernoted is a summary of particulars relating to Hairdressing Saloons during 1919 :—

Number on Register at close of year	...	...	...	...	141
Number of Visits paid to these	...	...	...	...	141
Number of Saloons on Register as Certified Premises	...	...	...	...	94
Uncertified Saloons	...	...	...	...	47
Certificate granted during the year	...	...	...	...	1
Number of New Basins Introduced	..	...	...	...	1





## SHOPS ACT, 1912 and 1913.

Quite a revolution has taken place during the last few years in the shop-keeping world, and although the Defence of the Realm Orders are still in force as regards closing in the evening, it is to be sincerely hoped that the old system is gone for ever, when it was quite common to find many shops open till 10 and 11 p.m. during the week, and 1 a.m. on Sunday morning. Another innovation introduced during the war of closing about midday for dinner is still being carried on in many cases.

Seven different classes of Traders have applied for closing or half-holiday orders, viz., Jewellers, Chemists, Hairdressers, Fishmongers, Butchers, Grocers, and Tobacconists.

Although a uniform half-holiday Order has not yet been passed for Edinburgh, all the Trades who have applied for an Order have declared Wednesday as their half-holiday.

Subjoined is a list of prosecutions under the Act.

Date.	Class.	Offence.	Result.
1915 Nov. 19	Multiple Shop . .	Failing to obey half-holiday order . .	Withdrawn by Fiscal
1916 April 5	do. . .	do. do. . .	Fined 5s., decision reversed by High Court
„ Oct. 25	Hairdresser . .	do. do. . .	Fined 5s.
1917 Dec. 4	Refreshment Rooms .	Employing assistants on half-holiday	Fined 10s.
„ „ „	do. .	do. do. .	do.
„ „ „	do. .	do. do. .	do.
1919 June 5	Fishmonger . .	Failing to obey closing order . .	Fined 7s. 6d.
„ Oct. 15	Grocer . .	Failing to obey half-holiday order . .	Admonished
„ Nov. 18	Furniture Dealer .	Failing to close for half-holiday . .	Fined £1.
„ Nov. 28	do. .	do. do. .	Fined 10s.

## SALE OF FOOD AND DRUGS ACTS.

During the period under review the number of samples procured and analysed under the above Acts amounted to a total of 1081. Of these, 219 were official, and 862 informal or test samples.

Of the 219 official samples taken, 78 were certified as adulterated. Proceedings were instituted in 18 cases and fines were inflicted amounting in all to £203.

The accompanying Table shows a detailed statement of the number and variety of the official samples taken, and the condition of these as subsequently determined by analysis.

In regard to samples of milk, while it would appear that the percentage of adulterated samples was out of all proportion to the number analysed, it might be well to state in explanation of this that these official samples are only taken after adulteration has been established by the previous purchase and analysis of preliminary or test samples.

The following Table showing the samples purchased, etc., during the last ten years is eloquent proof of the increasing duties entailed in the efficient enforcement of these Acts.

YEARS.	Number of Samples Analysed.	Convictions.	Amount of Fines.		
			£	s.	d.
1910	439	24	102	0	0
1911	588	23	135	0	0
1912	774	21	57	12	0
1913	1022	25	95	0	0
1914	920	16	65	7	6
1915	1071	32	199	0	0
1916	1144	28	251	10	0
1917	1025	27	239	0	0
1918	777	28	540	0	0
1919	1081	18	203	0	0

An interesting fact noted during the past year was, that while the percentage of adulterated milk samples was similar to that of former years, the amount of adulteration itself has been very considerably less. This is well exemplified by the fact that out of the total number of official samples taken during the present period only 7 were found to contain over 10 per cent. of added water, while in the previous year there was no less a number than 15, and of these 6 contained the large amount of over 20 per cent. water.

## SALE OF FOOD AND DRUGS ACTS—continued.

ARTICLE.	Number of Samples taken.	Genuine.	Adulterated.	Extent and Form of Adulteration.	Reported to Prosecutor.	Acquitted.	Convicted.	Fines Inflicted.			REMARKS.
								£	s.	d.	
Arrowroot	1	1	...	.....	...	...	...				
Barley	3	3	...	.....	...	...	...				
Cheese	3	3	...	.....	...	...	...				
Cinnamon	2	2	...	.....	...	...	...				
Coffee	2	2	...	.....	...	...	...				
Cream of Tartar	1	1	...	.....	...	...	...				
Ginger (Ground)	2	2	...	.....	...	...	...				
Lard	2	2	...	.....	...	...	...				
Margarine	3	3	..	.....	...	...	...				
Milk (Sweet)	186	108	...	.....	...	...	...				
Do.	...	...	1	Mixed with 2 % water	...	...	...				
Do.	...	...	1	Deficient in fat 3 %	...	...	...				
Do.	...	...	1	Mixed with 3 % water	...	...	...				
Do.	...	...	1	Deficient in fat 11 %	...	...	...				
Do.	...	...	1	Do. Do.	...	...	...				
Do.	...	...	1	Deficient in fat 5 %	...	...	...				
Do.*	...	...	1	Mixed with 6 % water	...	...	...				
Do.	...	...	1	Mixed with 5 % water	...	1	...	1	5	0	0
Do.	...	...	1	Mixed with 2 % water	..	...	...				
Do.	...	...	1	Deficient in fat 7 % and mixed with 2 % water	...	1	...	1	10	0	0
Do.†	...	...	1	Deficient in fat 4 % and mixed with 5 % water	...	...	...				Warned
Do.	...	...	1	Deficient in fat 10 %	...	1	...	1	3	0	0
Do.	...	...	1	Deficient in fat 10 %	...	...	...				Warned
Do.	...	...	1	Mixed with 3 % water	...	...	...				
Do.*	...	...	1	Deficient in fat 4 % and mixed with 9 % water	...	...	...				
Do.*	...	...	1	Mixed with 11 % water	...	...	...				
Do.*	...	...	1	Mixed with 6 % water	..	...	...				Warned
Do.	...	...	1	Deficient in fat 5 %	...	...	...				
Do.	...	...	1	Deficient in fat 12 % and mixed with 3 % water	...	1	...	1	80	0	0
Carry forward	205	127	19	Carry forward	...	4	...	4	98	0	0

\* Cases withdrawn, in order that Samples might be taken from the Wholesale Dealers.



## SALE OF FOOD AND DRUGS ACTS—continued.

ARTICLE.	Number of Samples taken.	Genuine.	Adulterated.	Extent and Form of Adulteration.	Reported to Prosecutor.	Acquitted.	Convicted.	Fines Inflicted.			REMARKS.
Brought forward	205	127	19	Brought forward ...	4	...	4	£	s	d.	
Milk (Sweet)	...	...	1	Deficient in fat 24 % ...	...	...	...	98	0	0	Warned
Do.*	...	...	1	Deficient in fat 41 % and mixed with 5 % water ...	...	...	...				
Do.	...	...	1	Mixed with 5 % water ...	1	...	1	10	0	0	
Do.	...	...	1	Deficient in fat 14 % ...	...	...	...				
Do.*	...	...	1	Mixed with 8 % water ...	...	...	...				Warned
Do.*	...	...	1	Deficient in fat 5 % and mixed with 9 % water ...	...	...	...				Warned
Do.	...	...	1	Mixed with 2 % water ...	...	...	...				
Do.*	...	...	1	Mixed with 11 % water ...	...	...	...				
Do.*	...	...	1	Mixed with 6 % water ...	...	...	...				
Do.	...	...	1	Deficient in fat 7 % ...	...	...	...				
Do.	...	...	1	Mixed with 8 % water ...	1	...	1	20	0	0	
Do.	...	...	1	Mixed with 6 % water ...	1	...	1	3	0	0	
Do.	...	...	1	Mixed with 6 % water ...	1	...	1	3	0	0	
Do.*	...	...	1	Mixed with 8 % water ...	...	...	...				
Do.	...	...	1	Mixed with 2 % water ...	...	...	...				
Do.*	...	...	1	Deficient in fat 27 % and mixed with 1 % water ...	...	...	...				
Do.	...	...	1	Mixed with 4 % water ...	1	...	1	3	0	0	
Do.*	...	...	1	Mixed with 6 % water ...	...	...	...				
Do.*	...	...	1	Deficient in fat 9 % and mixed with 8 % water ...	...	...	...				
Do.	...	...	1	Deficient in fat 17 % ...	1	...	1	3	0	0	
Do.*	...	...	1	Mixed with 7 % water ...	...	...	...				
Do.	...	...	1	Deficient in fat 12 % and mixed with 10 % water ...	1	...	1	10	0	0	
Do.	...	...	1	Mixed with 19 % water ...	1	...	1	4	0	0	
Do.*	...	...	1	Mixed with 9 % water ...	...	...	...				
Do.	...	...	1	Mixed with 2 % water ...	...	...	...				
Do.	...	...	1	Deficient in fat 14 % and mixed with 5 % water ...	1	...	1	5	0	0	
Do.	...	...	1	Mixed with 5 % water ...	1	...	1	5	0	0	
Carry forward	205	127	46	Carry forward ...	14	...	14	164	0	0	

\* Cases withdrawn, in order that Samples might be taken from the Wholesale Dealers.

## SALE OF FOOD AND DRUGS ACTS—continued.

ARTICLE.	Number of Samples taken.	Genuine.	Adulterated.	Extent and Form of Adulteration.	Reported to Prosecutor.	Acquitted.	Convicted.	Fines Inflicted.			REMARKS.
								£	s.	d.	
Brought forward	205	127	46	Brought forward ...	14	...	14	164	0	0	
Milk (Sweet)*	...	...	1	Deficient in fat 5 % and mixed with 5 % water ...	...	...	...				
Do.	...	...	1	Deficient in fat 7 %	...	...	...				
Do.	...	...	1	Mixed with 2 % water	...	...	...				
Do.	...	...	1	Do. Do.	...	...	...				
Do.	...	...	1	Do. Do.	...	...	...				
Do.	...	...	1	Deficient in fat 14 %	...	...	...				
Do.	...	...	1	Deficient in fat 2 %	...	...	...				
Do.	...	...	1	Deficient in fat 8 %	...	...	...				
Do.*	...	...	1	Deficient in fat 3 % and mixed with 2 % water ...	...	...	...				
Do.	...	...	1	Mixed with 2 % water	...	...	...				
Do.	...	...	1	Mixed with 2 % water	...	...	...				
Do.*	...	...	1	Mixed with 14 % water	...	...	...				
Do.	...	...	1	Mixed with 16 % water	...	1	1	3	0	0	
Do.	...	...	1	Deficient in fat 6 %	...	...	...				
Do.	...	...	1	Deficient in fat 3 %	...	...	...				
Do.	...	...	1	Mixed with 6 % water	...	...	...				Warned
Do.	...	...	1	Deficient in fat 8 % and mixed with 10 % water ...	1	...	1	8	0	0	
Do.*	...	...	1	Mixed with 5 % water	...	...	...				
Do.*	...	...	1	Mixed with 4 % water	...	...	...				
Do.	...	...	1	Deficient in fat 3 %	...	...	...				
Do.*	...	...	1	Mixed with 4 % water	...	...	...				
Do.	...	...	1	Mixed with 2 % water	...	...	...				
Do.	...	...	1	Deficient in fat 6 %	...	...	...				
Do.	...	...	1	Mixed with 2 % water	...	...	...				
Do.	...	...	1	Deficient in fat 15 % and mixed with 3 % water ...	1	...	1	20	0	0	
Do.	...	...	1	Deficient in fat 19 %	...	...	...				
Do.	...	...	1	Deficient in fat 7 %	...	...	...				
Do.	...	...	1	Deficient in fat 2 % and mixed with 5 % water ...	...	...	...				Warned
Carry forward	205	127	74	Carry forward ...	17	...	17	195	0	0	

\* Cases withdrawn, in order that Samples might be taken from the Wholesale Dealers.

## SALE OF FOOD AND DRUGS ACTS—continued.

ARTICLE.	Number of Samples taken.	Genuine.	Adulterated.	Extent and Form of Adulteration.			Reported to Prosecutor.	Acquitted.	Convicted.	Fines Inflicted.			REMARKS.
Brought forward	205	127	74	Brought forward ...			17	...	17	£	s.	d.	Warned
Milk (Sweet)	...	...	1	Deficient in fat 14 %	...	...	.	...	...	195	0	0	
Do.	...	...	1	Mixed with 2 % water	...	...	...	...	...				
Do.	...	...	1	Deficient in fat 23 %	...	...	1	...	1	8	0	0	
Do.	...	...	1	Deficient in fat 12 %	...	...	...	...	...				
Pepper (White)	5	5	...	.....			...	...	...				
Rice	2	2	...	.....			...	...	...				
Rice Flour	1	1	...	.....			...	...	...				
Tea	1	1	...	.....			...	...	...				
Vinegar	5	5	...	.....			...	...	...				
Number of Samples taken	219			Cases reported to Prosecutor			18						
Number found Genuine		141		Number acquitted ..				...					
Number found Adulterated			78	Number convicted ...					18				
				Total Amount of Fines ...						£203	0	0	





# Annual Report

of the

Sanitary Department of the City of Edinburgh

FOR THE YEAR 1919

Together with a Summary of Sanitary Improvements in the  
Years 1915, 1916, 1917, and 1918

By

ALLAN W. RITCHIE

M.R.San.Inst.

Chief Sanitary Inspector



SANITARY DEPARTMENT,  
CITY CHAMBERS,  
EDINBURGH, *September 1920.*

To

*The Scottish Board of Health and  
The Right Honourable the Lord Provost,  
Magistrates and Council of the City of Edinburgh.*

MY LORD PROVOST AND GENTLEMEN,

I have the honour of submitting my Report on the sanitary condition of the City and the operations of the Sanitary Department for the year 1919. Owing to the abnormal conditions created by the War, the publication of Reports was temporarily suspended during the years 1915-1918. A summary of the work accomplished throughout that period is therefore included in the present Report (page 96).

### HOUSING.

In the years preceding the war the housing problem had become more and more acute. In most localities the problem resolved itself into one of shortage of dwellings on account of the cessation of house-building. In the larger towns and cities, however, there had to be added the modernising of many of the existing tenemental dwellings as well as the task, hardly yet begun, of dealing with the large amount of uninhabitable property, and the improvement and reconstruction of the many congested areas. Legislation had been passed to enable Local Authorities to deal with the problem, and great expectations were raised for its early accomplishment. But the War dispelled these hopes and created difficulties, financial and otherwise, that shall hinder progress in this and other directions for many years. It is to be hoped, however, that the carrying out of this important aspect of social reform will not be unduly delayed.

A gratifying feature of the post-war change of outlook is the fact that the former apathy in regard to the housing problem has given place to a keen interest and great desire as well as determination to give effect to its solution. This has been very noticeable in our City. The many aspects of the problem are not now the concern alone of the Local Authority and Health Officials; they are the daily concern of the whole community. Some years ago the request of the Health Official for better housing was but a cry in the wilderness; to-day the demand is everywhere and clamant.

In Edinburgh, there is a shortage of dwellings, variously estimated, but large, and on that account there is much overcrowding. Young married couples unable to obtain a house for themselves have perforce to reside with their people or take furnished rooms. Growing families, which in the normal course of events would have removed to larger houses, have had to remain in their already crowded abodes, and in many cases houses are shared by two or more families. This state of affairs, even in the best circumstances, cannot continue indefinitely without bad results.

Happily, the Local Authority was among the first in the country to see the necessity for immediate action, and lost no time in formulating schemes, in the one case to provide new houses in various parts of the town under the congenial and healthy conditions of modern Town Planning, and in the other case to grapple with the question—once a sufficient number of new houses have been provided—of rooting out uninhabitable property, and improving and reconstructing the various unhealthy areas. In the former case, although considerable difficulties have been encountered, some progress has been made. The need, however, for more and more houses remains as great, and no time should be lost or efforts spared to supply them.

**Uninhabitable Houses.**—On the certificate of the Medical Officer of Health and the Chief Sanitary Inspector 89 houses which had become uninhabitable were ordered to be closed by the Corporation. Owing, however, to the prevailing scarcity of houses, an extension of time was given to the occupiers to find suitable dwellings. The following defects were found to exist in these properties:—general disrepair, inadequacy of sink and water-closet accommodation, want of proper light and ventilation, ruinous condition of walls and roofs, and insanitary state of sanitary appliances.

## NUISANCES.

**Inspection.**—For the purposes of regular and frequent inspection, the City is divided into 14 districts, following as nearly as possible the Ward boundaries, each district being supervised by an Inspector. Three qualified Women Inspectors are also employed in visiting the smaller houses in the more populous parts of the City, to ensure greater cleanliness in these dwellings and their surroundings.

The duties of the Sanitary Inspectors include inquiry into the existence of nuisances and supervision of the execution of sanitary improvements, repairs, etc. Two days in every week are set apart for the purpose of systematically surveying the whole districts to ascertain any external insanitary conditions in such places as areas, back courts, cellars, outbuildings, etc., and to have these brought to the notice of the responsible parties. In addition, when infectious disease such as Diphtheria occurs, thorough inspection is made of the houses, sanitary fittings, and general surroundings, and all matters requiring attention are immediately dealt with. Complaints made by occupiers and others are also inquired into, and action taken where necessary. These are frequently of a very trifling nature, arising from quarrels between occupiers, but more often they are well founded, and the efforts of the Department are at once exercised to effect a remedy. Sometimes, in order properly to investigate certain forms of complaint, repeated inspection has to be made, occasionally by night as well as by day.

Regular and frequent inspection is also made to ensure the sanitary condition of shops from which foodstuffs are sold, also restaurants, picture-houses, theatres, and places of public resort.

The various types of lodging-houses, including common lodging-houses, farmed-out houses, and houses let-in-lodgings, receive special attention to see that the requirements of the Regulations are duly observed.



The Water Cistern Inspectors, four in number, make a routine inspection of all domestic water cisterns to see that compliance is made with the Regulations.

An Inspector devotes his whole time to the inspection of the homes of children found attending school in a dirty and verminous condition.

Another Inspector is solely employed in carrying out the provisions of the Rats and Mice (Destruction) Act, 1919.

Throughout the war period the staff was greatly reduced on account of the enlistment in the army of no fewer than 14 men, and some temporary assistance had to be obtained until the men returned. It is gratifying to know that several members of the staff on war service were able to place their knowledge and experience of sanitation at the disposal of the military authorities. Unfortunately, one young man of bright promise, William Robertson, was killed, while another, John Smail, lost his right arm.

**Sanitary Improvements.**—While, during the war, it was impossible to continue at the same rate of progress as in former years in effecting a gradual improvement in the sanitation of the City, it is pleasing to record that much good work was done. The improvements were, as a rule, to rectify minor defects, much of the larger and more costly work having to be delayed until a more opportune time. Many improvements have been made upon the general structure and surroundings of dwellings as well as upon sanitary conveniences and fittings, including water-closets, sinks, etc. In dealing with defective water-closets the old apparatus was, in 63 cases, substituted by modern appliances, and in 535 cases the fittings were improved or repaired. Twelve insanitary water-closets were discontinued. In 49 instances defective iron sinks were substituted by earthenware sinks; repairs were also executed upon 194 sinks.

In 362 instances water-closets found in a choked condition were brought to the notice of the parties concerned and cleared. Similarly, 127 choked sinks, wash tubs, and other fittings, and 164 surface gratings of drains and 456 choked drains were cleared. In 198 cases choked and fractured waste-pipes, soil-pipes, and water-pipes were cleared or repaired.

Water-closets and sinks were, in 720 instances, found in a filthy condition and proper cleansing enforced.

Repairs were effected in 101 instances upon floors, doors, windows, ceilings, etc.; 98 houses were affected by flooding from defects in the flats above. Smells from shops underneath dwellings came under notice on 26 occasions.

Escapes of gas, dry-rot, dead vermin, etc., were the cause of complaint of bad smells at 31 houses.

In 91 instances back smoke in houses was caused by foul or obstructed vents.

Dampness in 32 houses was remedied or abated, and six damp houses were vacated. 13 shops found in a dirty state were cleaned by the tenants.

Other improvements of a varied character will be found detailed on pages 97-99.

In a review of the work that still requires to be done in the sanitary improvement of the City, reference must be made to the unhealthy areas already referred to that require reconstruction ; to the large number of dark or semi-dark and poorly ventilated common stairs and lobbies, many of which are frequently found in a dirty and smelling condition ; to the large number of dark and unventilated water-closet apartments and bathrooms containing, in many instances, fittings of an antiquated and foul-smelling type ; to the presence of so many closed and confined bed-recesses, frequently dark, in which people sleep for about a third of their lives breathing impure air ; to the vast amount of disrepair that has accumulated during the War ; to the large amount of sub-division of houses, with the consequent overcrowding of tenements, and the inadequacy and foulness of the sanitary conveniences used in common by several families ; and to the general conditions of dirt and squalor found in not a few dwellings. All of these will occupy the time and attention of the Department for many years, and will require the fullest co-operation of the Local Authority, owners, factors, and occupiers in dealing with them.

### DIRTY HOUSES.

In the course of inspection 563 houses came under notice in which the floors and the bedding and clothing were so dirty as to call for immediate cleansing.

Of that number 126 were in St Leonard's Ward, 120 in St Giles' Ward, 80 in Canongate Ward, and 68 in Portobello Ward.

The number of one-apartment houses in this condition was 195 ; two-apartment houses, 296 ; and three-apartment houses, 72.

The occupier was in each case either warned verbally or served with a Notice, and revisits were made to the houses to see that the cleansing had been done.

The walls and ceilings of 402 houses, which were found in a dirty condition, were cleansed and either repainted or repapered by the owners or occupiers.

In a considerable number of these dirty houses the occupiers were aged women living alone, and totally unable to attend to either their personal or household cleanliness. Many of them did not realise the dirty and verminous condition they were in, and when it was suggested that a friend or neighbour should be got to lend a helping hand the hint was ignored. The Old Age Pension is often the only means of subsistence, but, small as it is, it appears to be made a sufficient means to eke out a living and to maintain independence. In a few instances arrangements were made with friends to give help, and in other cases, where circumstances permitted, arrangements were made for removal to a home.

One or two instances may be quoted from the Inspectors' reports :—

“Mrs —, aged 89 years. I found this old woman living alone in a single room. Her person and house were very dirty. I called on two relatives who made arrangements to have her removed to a Home.”

"Mrs —, aged 70 years. In course of visiting the houses in this tenement I came across this woman living alone and quite unfit to look after herself. After consultation with a relative she was persuaded to be removed to the Poorhouse."

"Mrs —, aged 60 years. This person I found too ill to keep the premises and her person in a cleanly condition. She had no friends, and on the matter being reported to the Parish Authority she was removed to the Poorhouse."

"Mrs —, aged 80 years. This woman lived in a sub-let room during the last ten years, and for a considerable time had not been in bed but slept in a chair and on the floor among rags and dirt. I tried to persuade her to go to Craiglockhart Hospital, but she would not go. Efforts were then made to persuade her to go to a Home, and eventually she consented on condition that she would be allowed to take her parrot with her. When visited recently she appeared to be a different being. She was so clean and comfortable, and her parrot was a great source of interest in the Home."

At present there is no power to compel any one to be removed, and it is not very desirable that there should be; yet these old people are a danger both to themselves and their neighbours. This kind of case appears to have become more numerous since the granting of the Old Age Pension, which had for one of its objects the keeping of old people out of the Poorhouse, in itself a most laudable thing, but provision should be made, in cases where the old people are friendless and unable to attend to themselves, to grant the pension conditionally on their being properly attended to. It also appears desirable that a number of small almshouses should be provided for aged people with provision for the supply of food and for nursing attendance where required.

### CLEANING AND VENTILATION OF COMMON STAIRS.

Throughout the year, 1128 common stairs and passages were painted after notices had been issued to the owners.

The Regulations in regard to the sweeping and washing of Common Stairs and Passages were on numerous occasions found by the Inspectors to have been neglected, and the occupiers responsible had to be requested on 2869 instances to undertake the cleansing. This neglect is common not only in the more congested districts, but also in better localities, and causes much heart-burning and annoyance to those occupiers who duly observe the requirements.

The methods adopted in cleansing the stairs and passages could be very greatly improved. In sweeping it is not an infrequent habit to brush the dust either over the sides of the steps or right down to the lowest part of the stairs, thus causing clouds of dust to arise, which, when often repeated, blacken the stair walls and ceilings. The better practice is to sweep the dust from each step into a shovel and thereafter burn the dust in the fire. Much carelessness also prevails in the manner of washing the stairs. Too often it is done in a "slap-dash" fashion, with the result that the stair walls are splashed and disfigured.



In better localities, where the washing of the stairs is usually done by charwomen for a stated sum, difficulty has been experienced in obtaining women to do the work. Unless a woman is guaranteed a sufficient number of stairs to keep her employed the whole day she will not readily take to this work. The time may not be far distant when some scheme will have to be devised for the cleaning being done either by a private company or some public department.

In 114 instances the attention of the Department had to be given to the keeping of animals in dwellings or in close proximity thereto. Frequent complaint is made by citizens of persons permitting their domestic animals to cause nuisance in the common stairs, passages, and back greens. Considerable nuisance is also caused upon the footpaths, to the discomfort of pedestrians. This form of nuisance is most objectionable, and while in many cases it may be difficult to prevent, it could be very greatly minimised by those who keep domestic animals exercising a proper oversight of them.

Much carelessness also prevails in certain parts of the City, by occupiers holding up their domestic refuse, through neglect to take it to the street in the morning, and dumping it in any odd corner during the day or night. The Inspectors came across 2179 accumulations of rubbish, garbage, and filth in areas, vacant houses, cellars, etc., and had to arrange for their removal.

Another disgusting habit on the part of not a few occupiers is to cast garbage and filth over their windows into the back court or green. Some people seem to have very little regard for the tidiness of their surroundings, far less their own or neighbours' health. This is an aspect of citizenship that might very well receive greater attention.

### HOUSE FLIES.

The special attention of the Department has been given to the problem of the house fly. Stable manure being the most prolific source of propagating these filth- and disease-carrying insects, a strict watch is kept over stables in order to see that the manure therefrom is regularly and frequently removed. Much can also be done by the citizens in seeing that accumulations of all forms of garbage are prevented, and that the general surroundings of dwellings as well as the houses themselves are maintained in a thorough state of cleanliness. Foodstuffs, especially milk, should also be kept properly covered, and away from the reach of flies.

### OVERCROWDING.

Owing to the shortage of dwelling-houses a very considerable amount of overcrowding has taken place. Only those cases, however, were dealt with that were specially complained of, or where other circumstances required that attention be given. Of 103 such cases, 22 were one-apartment houses, 72 were two-apartment houses, and 10 were three-apartment houses. In 22 instances two or more families were found



living together. The air space normally allowed per person in the smaller houses is the low figure of 400 cubic feet, but in many cases, owing to the extent of the overcrowding, it had been reduced to less than 300 cubic feet, and in a few instances to 158, 188, 189, and 198 cubic feet respectively. As already indicated, this state of things is fraught with much harmful possibility. In 35 of the cases the overcrowding was abated, but at the end of the year in 68 instances it was still found impossible to do anything.

**Overcrowding at Portobello during Holiday Season.**—As a considerable amount of overcrowding had taken place in the Portobello area during the holiday season in previous years, particularly in the month of July, visits were made last year to the various houses a few weeks prior to the letting season, and warnings given to the occupiers. This, doubtless, had considerable effect in minimising the overcrowding. Yet, despite the warnings, gross overcrowding was found to exist in a number of cases. As an indication of what takes place the following most glaring instances might be stated :—

LOCALITY.	No. of Apartments.	No. of Occupants.	Air Space available per Person.
Wilson's Park - - 1	11	179 cubic feet.	
Bath Street - - 3	22	197 „	
Wilson's Park - - 3	16	158 „	

*N.B.*—According to the Statute the number of cubic feet of air space available per person should be 400.

These cases were reported to the Public Prosecutor, but owing to the house shortage and other circumstances it was deemed inadvisable to prosecute. A report was thereafter submitted to the Public Health Committee in order that steps might be taken to deal effectively with the matter in future.

### TICKETED HOUSES.

These are small houses, numbering 7162, of one and two apartments, having a capacity of less than 2000 cubic feet, that have been measured and have tickets placed over the doors to indicate the air space and the maximum number of persons that can occupy them. The inspection of these houses is carried out by three Women Inspectors, and the following Table gives a record of their inspections :—

Number of Inspections of Houses - - - - -	8329
„ Revisits to Stairs and Houses - - - - -	1047
„ Houses found dirty, and cleansed - - - - -	115
„ Stairs found dirty, and cleansed - - - - -	472
„ Houses in which bedding was found dirty, and cleansed - - - - -	113
„ Water-closets inspected—	
Private - - - - -	396
Mutual - - - - -	4168
„ Water-closets found dirty, and cleansed - - - - -	169

The Women Inspectors during the inspection of ticketed houses also visited the other houses of larger capacity in the same stairs with the undernoted results :—

Number of houses inspected	-	-	-	-	-	5527
„ found dirty, and cleansed	-	-	-	-	-	81
„ in which bedding was found dirty, and cleansed	-	-	-	-	-	68

### COMMON LODGING-HOUSES.

In the year 1914 there were 21 Common Lodging-Houses in the City. Since then the Public Health Committee have refused to register a number of the worst type of the houses, and one or two others have been voluntarily closed. There are now 12 houses remaining, with accommodation for 1472 lodgers. Three of the houses are set apart for female lodgers.

The management of the houses during the year has been satisfactory. On only a few occasions had the attention of the keepers to be directed to minor contraventions of the Regulations, and these were immediately rectified. Painting and lime-washing which, during the last few years of the war, could not be carried out, has been again resumed, and the houses have been brought up to the required standard.

The amount charged for nightly accommodation in a number of the houses has been increased by the keepers to from 6d. to 9d. per night, as compared with the charges of 4d. to 6d. made in the year 1914. As these charges take this class of house out of the category of a Common Lodging-House, the Board of Health recommend that the Regulations for Houses let-in-Lodgings should be applied. This measure is presumably temporary until an amendment has been made to the clause of the Public Health Act which defines this class of house. In any such amendment provision should be made for improving the standard of accommodation. Many lodgers appear now to be receiving more money than they can spend in a satisfactory manner, and, in some cases, they are content to work for such length of time only as will enable them to pay the cost of their lodgings and food. Every effort should be made to increase their standard of living when the means are at hand of attaining this desirable object. This might be done by improving the type of lodging-house with more homely surroundings, and with provision for the supply of proper meals.

It is regrettable to notice that drunkenness amongst this class of lodgers has greatly increased. This appears also to be due to the high earnings of the lodgers. It has been observed, too, that a considerable number of these people have taken to the drinking of methylated spirits, especially in the morning. This habit has also been noticed amongst the lower grade of inhabitants in various parts of the City.

### FARMED-OUT HOUSES AND HOUSES LET-IN-LODGINGS.

At the end of the year there were 216 Farmed-out Houses on the Register, with accommodation for 788 occupiers. These houses were regularly visited by the Inspectors by night as well as by day with a view to detecting any contraventions of the Regulations. An application, in terms of the Housing and Town Planning

Act, 1919, was made by the Corporation to the Board of Health to grant the powers contained in the Glasgow Corporation Confirmation Order, 1918, for dealing with this class of house.

There were 8 Houses let in Lodgings on the Register during the past year, with accommodation for 472 occupiers. These also were regularly visited with a view to the maintenance of a high standard of cleanliness.

### WATER SUPPLY.

The only matter calling for notice in connection with water supply is the method of distribution to dwelling-houses by means of cisterns. With rare exceptions, it is only in the more modern class of property that main taps have been introduced for culinary purposes, and even in these cases the Regulations of the Water Trust do not permit of the complete abolition of the cisterns. To far too great an extent the water cisterns in the older class of property are to be found in very insanitary positions—not infrequently in water-closet apartments, coal cellars, etc.—and occasionally unprovided with covers, and it is not surprising that they are often found in a dirty state. From a sanitary point of view the provision of domestic water cisterns is very unsatisfactory, and one would wish to see a clean sweep of them, accompanied by the introduction of a supply of water into every house direct from the “main.” During the year, 511 houses were temporarily without water supply on account of burst pipes, etc. The following Table is a record of the inspections made, and the conditions found during the year 1919:—

	St Bernard's	St Stephen's	St Andrew's	St Leonard's	George Square	Haymarket	Newington	Portobello	Merchiston	TOTAL.
No. of cisterns inspected from January to December 1919 .	302	340	232	3483	3103	2400	1587	1507	120	13,074
No. of re-examinations made .	40	26	48	237	146	208	47	77	8	837
No. of cisterns found clean .	262	314	184	3246	2957	2292	1540	1430	112	12,237
No. of cisterns found dirty .	40	26	48	237	146	208	47	77	8	837
No. of notices served to clean cisterns . . . . .	40	26	48	237	146	208	47	77	8	837
No. of cisterns cleaned in consequence of notice . . .	40	26	48	237	146	208	47	77	8	837
No. of cisterns found without covers . . . . .	2	1	...	18	10	5	1	5	...	42
No. of cisterns provided with covers . . . . .	2	1	...	18	7	5	1	5	...	39
No. of notices to cover . . .	2	1	...	16	10	5	1	5	...	40
No. of cisterns found with waste pipes discharging openly .	302	340	232	3483	3103	2400	1587	1507	120	13,074
No. of cisterns found with waste pipes connected to drain .	...	...	...	...	...	...	...	...	...	...
No. of houses where drinking water was derived from tap off main . . . . .	35	69	51	478	745	344	787	252	...	2,761



### DRAINAGE.

The supervision of house drainage is a matter which is dealt with by the Burgh Engineer. No report, therefore, falls to be made by me under this heading.

### OFFENSIVE TRADES.

There was no change in the number of Offensive Businesses carried on in the City. These Trades are as follows :—

Tanners	-	-	-	-	-	-	-	3
Hide and Skin Factors	-	-	-	-	-	-	-	4
Gut Scraper	-	-	-	-	-	-	-	1
Glue and Size Maker	-	-	-	-	-	-	-	1
Skinner	-	-	-	-	-	-	-	2
Soap Boiler	-	-	-	-	-	-	-	1

To these 61 inspections were made to see that they were maintained in accordance with the Bye-laws.

### SCHOOLS.

Frequent inspections of the Schools were made with reference to cleanliness and the condition of the sanitary appliances. Several Voluntary Schools which were taken over by the Education Authority had become unsatisfactory in these respects, and the matter was brought to the notice of those concerned, and in some cases improvements have been effected, whilst in others structural alterations are under consideration.

### VERMINOUS PERSONS.

By arrangement with the Edinburgh Education Authority, an Inspector attached to the Sanitary Department devotes his entire time to visiting the homes of dirty and verminous children discovered attending the Schools in the City under the control of the Education Authority.

During the year 524 cases, involving 640 children, came under the supervision of this Inspector. Upon inspection, 60 houses were found having the floors and bedding in a dirty condition. The walls and ceilings of 20 houses were also in a dirty state; while in 4 houses overcrowding was discovered.

The results effected included the bathing of 443 children, and the disinfection at the City Disinfecting Station of the children's clothing and 185 sets of bedding.

### TENTS AND VANS.

On several occasions throughout the year there was an influx of show-people to the various show-grounds throughout the City, and the vans and surroundings were kept under observation by the Inspectors to see that the Bye-laws were duly complied with.



A Petition was lodged by the residents in the locality of Annandale Street ground as to the noises and nuisance being caused there by the show-people. Arrangements were made by the lessee for the removal daily by the Cleansing Department of all refuse and filth, and instructions were given to safeguard the cleanliness of the surroundings. Temporary sanitary accommodation was also provided. It is, however, desirable that some permanent lavatory accommodation with proper drainage and a plentiful water supply should be provided at the recognised show-grounds where so many show-people reside for lengthy periods, and where so many visitors of both sexes congregate.

### SHOPS INSPECTION.

Regular inspections were made of all shops where foodstuffs are sold, and, as a result, many matters requiring attention were brought to the notice of those responsible, who had the necessary improvements effected. The following Table shows the nature of these improvements at the various classes of shops.

Table showing nature of nuisance and improvements effected in connection with Shops where Foodstuffs are sold.

Nature of nuisance and improvements effected.	Bakers.	Butchers.	Fruiterers.	Fishmongers.	Grocers.	Confectioners.	Restaurants.	Fish and Chip Restaurants.	Totals.
New sinks substituted - - -	...	...	..	...	...	...	...	1	1
W.C.'s (washdown) substituted -	...	...	...	...	...	1	...	...	1
Sinks and W.C.'s repaired - -	...	1	1	...	...	1	1	1	5
Foul W.C.'s and sinks cleaned -	...	1	1	...	...	1	...	...	3
Premises limewashed - - -	...	4	3	1	1	1	...	6	16
Rats exterminated - - - -	3	5	4	...	9	2	10	1	34
Accumulations of refuse removed -	...	1	4	5	4	1	...	11	26
Cisterns found dirty and cleansed -	...	...	...	...	...	...	...	...	...
Cistern covers provided - - -	9	6	3	1	5	6	4	1	35
Totals - - -	12	18	16	7	19	13	15	21	121

## RAT DESTRUCTION.

During the year the Rat Destruction Order, 1918, was superseded by the Rats and Mice (Destruction) Act, 1919, which provides for a penalty not exceeding £5 being imposed upon any person who shall fail to take such steps as may, from time to time, be necessary and reasonably practicable for the destruction of rats and mice on or in any land or premises of which he is the occupier, and for a penalty not exceeding £20 where he has been served with a Notice under the Act.

In terms of this Act I was appointed by the Corporation to supervise the work of rat destruction in the City. The services of the rat destruction inspector under the former Order were also retained.

A complete survey has been made of the City to ascertain the premises that are infested by the vermin, and the attention of the occupiers has been directed to the terms of the Act. Advice has also been given in the methods of extermination and assistance provided in undertaking that work. The co-operation of the other City Departments has also been secured for the extermination of the vermin from the property of the Local Authority.

In some respects it is unfortunate that the obligation to exterminate the rats and mice has been placed upon the occupiers. The promoters of the Act had doubtless in mind the necessity for rat destruction by occupiers of farms and country places generally. Some difficulty arises, however, when the matter falls to be dealt with in cities and towns, especially in connection with tenemental property. As a rule, in such premises, infestation is due to structural defects in the drains and other parts, and it often happens that the rats are present only in one or two of the houses. It is, therefore, unfair to call upon the occupiers of these houses to carry out the whole work of extermination. It is impossible to do the work satisfactorily without properly preventing the entrance of the vermin by rat-proofing the premises, and this work can be done only by the owners. It is, therefore, important that in any amendment of the Act this matter should receive careful attention. Meanwhile, besides issuing notices to the occupiers, the attention of the owners is directed to the presence of rats upon the premises, and a request made to have structural defects put in order.

It is gratifying to report that many occupiers appreciate the desirability of speedy and complete extermination together with the adoption of preventive measures, and where such work is carried out energetically and persistently success is bound to follow. The best results cannot be obtained, however, where co-operation is lacking and the work is carried out half-heartedly.

A number of occupiers experience difficulty in deciding as to the best kind of exterminants to use, and the experience of the Department is, on these occasions, placed at their disposal. I am convinced, however, that in numerous cases it would be much better if the baits were provided by the Local Authority at a reasonable charge and instructions given to the occupiers as to the application of same. The best exterminants are sometimes not readily obtainable, and those recommended by the Board of Agriculture require to be specially prepared and this rather hinders their free use.

Undernoted is a Table showing the number of complaints dealt with during the year and the class of premises in which the rats were present :—

Number of complaints dealt with	165
---------------------------------	-----

*Class of Premises—*

Tenements	45
Stables and outbuildings	10
Bakers' shops	3
Butchers	5
Confectioners	2
Fruiterers	4
Grocers	9
Restaurants	10
Fried Fish shops	1
Other premises	76
Number of premises completely cleared of rats	69
Number of premises in which tradesmen were still occupied under supervision in the extermination of the vermin, and to prevent their recurrence	52
Number of complaints referring to the presence of mice, voles, etc.	10

I am,

My Lord Provost and Gentlemen,

Your obedient Servant,

ALLAN W. RITCHIE.

# SANITARY IMPROVEMENTS IN 1915, 1916, 1917, AND 1918.

NATURE OF IMPROVEMENT.	
Accumulations of rubbish, garbage, and filth removed from areas, roofs, cellars, and vacant houses - - - -	8,933
Stairs and passages in a dirty condition, and cleaned by tenants - - - -	12,206
Choked w.c.'s cleared - - - -	1,120
W.c.'s insufficiently lighted and ventilated—improvements effected - - - -	102
W.c.'s removed to more sanitary situations	53
„ requiring removal to more sanitary situations, and under arrangement -	8
Defective w.c.'s—	
New apparatus substituted - - -	531
Work in progress - - - -	72
Improved or repaired - - - -	1,594
Partitions of w.c.'s repaired - - - -	30
Water-closets introduced - - - -	32
Insanitary water-closets removed - - -	437
W.c.'s and sinks in a filthy condition and cleaned - - - - -	2,140
Sinks introduced - - - - -	36
Insanitary sinks abolished - - - -	157
Sinks removed to a more sanitary situation	8
Defective Sinks—	
Earthenware sinks substituted - - -	219
Repaired - - - - -	410
Choked sinks, washing tubs, etc., cleared	496
Houses flooded from defects on flats above	289
Smells from shops underneath dwellings	80
Animals kept in, or in close proximity to dwellings - - - - -	105
Houses lime-washed and cleaned by tenants - - - - -	506
Houses lime-washed and cleaned by owner in terms of sec. 110, Edinburgh Municipal and Police Act, 1879 -	1,430
Floors and bedding of houses in a dirty condition, and cleaned by tenants -	2,113
Staircases painted - - - - -	2,103
„ ventilated - - - - -	10
Nuisances due to bad smell in dwelling houses caused by escapes of gas, dry-rot, dead vermin, etc. - - - -	168
Damp Houses—	
Remedied or abated - - - - -	164
Vacated - - - - -	68
Houses found uninhabitable and vacated	3
Houses overcrowded - - - - -	833
Reported cases of overcrowding - - -	338
Carry forward	36,794

NATURE OF IMPROVEMENT.	
Brought forward	36,794
Houses infested with rats - - - -	154
„ „ „ other vermin - - - -	112
„ temporarily without water supply due to burst pipes, etc. - - - -	3,181
Smoke in houses due to foul or obstructed vents - - - - -	155
Accumulations of manure near dwellings	865
Disused cellars cleaned and closed - -	590
Choked surface gratings cleared - - -	797
„ drains cleared - - - - -	1,027
Walls of areas, courts, passages, lime-washed - - - - -	18
Areas and courts surfaced and drained -	37
Broker's shops and rag stores cleaned -	9
Nuisances arising from offensive businesses investigated, and where necessary abated—	
Tanneries - - - - -	28
Glumakers - - - - -	7
Piggeries - - - - -	2
Skinners, etc. - - - - -	54
Gut scraping works - - - - -	9
Fried fish shops - - - - -	17
Restaurant kitchens lime-washed - - -	64
Shops cleaned by tenants - - - - -	155
„ by owners - - - - -	4
Fractured waste pipes, and water supply pipes repaired - - - - -	588
Walls of w.c.'s used in common, limewashed	1,831
Urinals found dirty and cleaned - - -	14
„ repaired - - - - -	7
Ashpits removed - - - - -	2
Dry closets removed - - - - -	7
Dark bed recesses in houses opened up -	35
Common lobbies giving entrance to houses, lighted and ventilated - - - - -	6
Cisterns found dirty and cleaned - - -	1,449
„ covers provided - - - - -	98
„ removed to more sanitary situations - - - - -	8
Cisterns from which source of contamination has been removed by disconnection of w.c. apparatus, or introduction of main taps - - - - -	36
Cisterns repaired - - - - -	43
Total	48,203



# SANITARY IMPROVEMENTS IN 1919.

NATURE OF IMPROVEMENT.	Calton	Canongate	Newington	Morningside	Merchiston	Gorgie	Haymarket	St Bernard's	Broughton	St Stephen's	St Andrew's	St Giles'	Dalry	George Square	St Leonard's	Portobello	TOTALS for Year 1919.
Accumulations of rubbish, garbage, and filth removed from areas, roofs, cellars, and vacant houses ... ..	94	249	39	39	37	52	31	47	113	163	144	312	57	194	434	174	2179
Stairs and passages in a dirty condition and cleansed by tenants ... ..	185	316	76	64	81	127	25	81	72	197	314	108	166	321	640	96	2869
Choked w.c.'s cleared ... ..	8	63	11	2	1	7	1	7	6	13	14	75	8	35	81	30	362
W.c.'s insufficiently lighted and ventilated— Improvements effected ... ..	...	...	...	...	...	...	...	...	...	...	2	1	1	1	2	1	8
W.c.'s removed to more sanitary situations ... ..	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	3
Defective w.c.'s— New apparatus substituted ... ..	3	2	2	2	...	...	4	1	2	5	2	8	7	13	11	1	63
Improved or repaired ... ..	9	60	7	5	8	20	8	10	7	28	24	98	46	80	99	26	535
Partitions of w.c.'s repaired ... ..	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	2
W.c.'s introduced ... ..	...	...	...	...	...	...	...	1	2	...	...	1	...	2	...	...	6
Insanitary w.c.'s removed ... ..	1	1	...	...	...	...	...	1	...	2	...	3	...	4	...	...	12
W.c.'s and sinks in a filthy condition and cleansed ... ..	30	141	12	2	2	1	4	6	7	41	53	125	65	71	122	38	720
Sinks introduced ... ..	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Insanitary sinks abolished ... ..	1	...	...	...	...	...	...	1	...	1	...	...	2	...	...	...	5
Defective sinks— Earthenware sinks substituted ... ..	5	...	1	3	...	2	1	4	1	5	3	5	12	2	3	2	49
Repaired ... ..	16	5	2	4	4	14	2	3	11	6	3	26	33	41	10	14	194
Choked sinks, wash tubs, etc., cleared ... ..	6	25	2	2	...	2	1	3	2	10	5	21	5	18	19	6	127
Houses flooded from defects on flats above ... ..	11	1	...	7	4	2	2	2	4	10	1	13	2	23	13	3	98
Smells from shops underneath dwellings ... ..	2	1	...	2	1	...	...	2	4	...	6	2	1	1	3	1	26
Animals kept in, or in close proximity to, dwellings ... ..	16	7	4	1	8	27	...	2	6	6	4	1	16	6	8	2	114
Carry forward ... ..	387	871	156	133	147	254	79	171	237	488	576	800	421	813	1445	395	7373

## SANITARY IMPROVEMENTS IN 1919—continued.

NATURE OF IMPROVEMENT.	Caltoun	Canongate	Newington	Morningside	Merchiston	Gorgie	Haymarket	St Bernard's	Broughton	St Stephen's	St Andrew's	St Giles'	Dalry	George Square	St Leonard's	Portobello	TOTALS for Year 1919.
Brought forward ...	387	871	156	133	147	254	79	171	237	488	576	800	421	813	1445	395	7373
Houses lime-washed and cleansed by tenants ...	2	13	1	...	1	2	...	1	2	2	...	22	4	5	10	10	75
Houses lime-washed and cleansed by the owners in terms of Section 110, Edinburgh Municipal and Police Act, 1879 ...	30	12	2	3	3	5	1	7	4	8	24	95	12	42	59	20	327
Floors and Bedding of houses in a dirty condition and cleansed by tenants ...	22	80	12	1	1	5	12	6	8	11	32	120	22	37	126	68	563
Staircases painted ...	85	145	28	20	42	73	17	14	60	57	46	140	76	110	165	50	1128
Staircases ventilated ...	...	...	1	...	...	...	...	...	...	...	...	1	...	2	...	...	4
Nuisances due to bad smells in dwelling-houses caused by escapes of gas, dry-rot, dead vermin, etc. ...	2	1	1	2	2	1	4	1	4	2	...	3	2	1	5	...	31
Damp houses remedied or abated	2	...	2	...	2	4	...	2	...	1	2	7	...	8	...	2	32
Damp houses vacated ...	...	...	...	...	...	1	...	1	...	1	...	...	...	1	1	1	6
Houses found uninhabitable and vacated ...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Houses closed in terms of Section 206, Edinburgh Municipal and Police Act, 1879 ...	...	...	...	...	...	...	...	...	...	...	...	89	...	...	...	...	89
Houses overcrowded ...	7	10	3	2	1	2	1	...	4	1	2	15	11	4	21	19	103
Reported cases of overcrowding	2	4	...	2	...	1	1	2	1	1	...	22	1	...	11	2	50
Houses infested with rats ...	16	15	8	2	8	11	9	5	6	6	8	30	9	17	8	16	174
Houses infested with other vermin ...	8	3	1	1	1	2	...	...	1	3	2	2	...	5	9	3	41
Houses temporarily without water supply, due to burst pipes, etc. ...	...	8	22	...	...	11	1	12	18	30	...	17	76	70	197	49	511
Smoke in houses due to foul or obstructed vents ...	1	2	2	1	1	4	...	2	...	...	3	50	2	8	12	3	91
Accumulations of manure near dwellings ...	29	32	4	4	5	1	13	5	48	41	14	5	5	9	6	7	228
Disused cellars cleaned and closed ...	...	...	...	...	...	...	...	2	1	10	10	11	2	13	27	...	76
Choked surface gratings cleared	17	14	...	1	3	37	9	3	7	7	6	5	18	13	17	7	164
Choked drains cleared ...	25	32	12	7	4	28	9	10	20	28	19	66	45	53	74	24	456
Carry forward ...	635	1242	255	179	221	442	156	244	421	697	745	1500	706	1211	2193	676	11,523

## SANITARY IMPROVEMENTS IN 1919—continued.

NATURE OF IMPROVEMENT.	Calton	Canongate,	Newington	Morningside	Merchiston	Gorgie	Haymarket	St Bernard's	Broughton	St Stephen's	St Andrew's	St Giles'	Dalry	George Square	St Leonard's	Portobello	TOTALS for Year 1919.
Brought forward ...	635	1242	255	179	221	442	156	244	421	697	745	1500	706	1211	2193	676	11,523
Walls of areas, courts, and passages lime-washed ...	...	1	...	...	...	...	...	...	...	2	1	...	...	1	...	1	6
Areas and courts surfaced and drained ...	...	...	...	...	...	...	...	...	1	...	...	2	...	1	...	...	4
Brokers' shops and rag stores cleaned ...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	...	...	3
Nuisances arising from offensive businesses investigated, and where necessary abated:—																	
Tanneries ...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
Skinners, etc. ...	...	...	...	...	...	4	...	...	2	...	...	1	...	...	...	...	7
Fried fish shops ..	3	1	...	...	...	...	...	...	...	...	1	...	...	...	...	1	6
Shops cleaned by tenants ...	4	2	...	...	1	...	...	...	...	...	...	...	...	2	2	2	13
Shops cleaned by owners ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Choked and fractured waste-pipes, soil-pipes, and water-pipes cleared or repaired ...	8	15	3	3	5	6	2	3	7	9	9	37	31	15	38	7	198
Repairs to floors, doors, windows, ceilings, etc. ...	5	2	...	2	5	2	3	...	1	8	3	26	1	21	21	1	101
Walls of w.c.'s used in common, lime-washed ...	32	281	3	...	15	20	8	30	6	45	132	493	107	164	369	20	1725
Urinals found dirty, and cleansed	1	...	...	2	...	1	1	...	1	...	...	2	2	5	...	...	15
Urinals repaired ...	...	...	...	...	...	...	...	...	...	...	...	3	1	...	...	1	5
Cisterns found dirty and cleansed	1	...	48	1	8	2	208	40	1	26	48	5	2	146	240	78	854
Cistern covers provided ...	1	...	2	...	...	...	5	2	...	1	...	...	...	10	18	5	44
Cisterns repaired ...	19	4	...	1	3	10	1	...	2	3	1	4	1	4	7	...	60
Cisterns from which source of contamination has been removed by the disconnection of w.c. apparatus or introduction of main taps ...	...	1	1	...	...	...	...	2	...	3	...	...	...	2	...	...	9
Totals ...	710	1549	312	188	258	489	384	321	442	794	940	2075	851	1583	2888	792	14,576

## SUMMARY—YEAR 1919.

Number of complaints by citizens . . . . .	2,083
„ „ „ other Departments . . . . .	150
	2,233
Number of nuisances discovered and reported by District Inspectors . . . . .	12,343
Total number of nuisances dealt with by the Department . . . . .	14,576
Of these have been abated . . . . .	14,461
The remainder being in progress or under arrangement . . . . .	115
Number of intimations of existence of nuisance served . . . . .	941
„ notices to remove nuisances served at the instance of the Local Authority . . . . .	47
„ notices delivered cautioning persons against casting garbage over windows . . . . .	1,600
„ notices served on occupiers, failing to take due rotation of stair sweeping and washing . . . . .	1,227
„ notices served for the cleansing of dirty areas, cellars, etc. . . . .	820
„ „ „ „ whitewashing and cleansing of houses . . . . .	339
„ „ „ „ removal of accumulation of manure . . . . .	35

## PROSECUTIONS.

Nature of Offence.	Reported to Prosecutor.	Convicted.	Fines.			Remarks.
			£	s.	d.	
Failing to whitewash and properly cleanse common kitchen, common lobby, etc. . . . .	1	1	0	5	0	
Failing to wash and sweep common passage . . . . .	1	1				Found guilty and admonished.



# Annual Report

of the

Veterinary Department of the City  
of Edinburgh

FOR THE YEAR 1919

By

ARTHUR GOFTON

F.R.C.V.S.

Chief Veterinary Inspector



VETERINARY DEPARTMENT,  
CITY CHAMBERS,  
EDINBURGH, *September 1920.*

To  
*The Lord Provost, Magistrates, and  
Council of the City of Edinburgh.*

MY LORD AND GENTLEMEN,

I beg to submit herewith my Report on the working of the Veterinary Department during the year 1919. Owing to the war, no Annual Report has been issued by this Department since its inception in 1915. During the year under consideration, war conditions continued to influence the work, and the authorised staff was only completed in the later months.

**Inspection of Meat and other Foods.**—Constant attendance has been given at the Slaughterhouses for the inspection of all animals slaughtered for food purposes. The Gorgie Abattoir continued to be used throughout the whole of the year as a Government Slaughterhouse under the system of food control—a fact which exercised a distinct influence not only on the total numbers, but also on the numbers of particular grades or classes of animals passing through.

The total number of animals slaughtered shows a decrease of 39,956 as compared with the preceding year. This is wholly attributable to the diminished numbers of sheep available for food purposes; for, whilst cattle, calves, and swine show increases of 6243, 4618, and 2502 respectively, sheep show a decrease of 53,319, which is equivalent to over 30 per cent. of the supplies available in 1918. This fall is a reflection of the diminished sheep population of the country.

A pronounced increase in the number of cows sent for slaughter at the City Abattoirs has been a noticeable feature during the war years, the maximum having been reached in the year under consideration, as is shown by the following figures for the last six years:—

1914	1915	1916	1917	1918	1919
655	2635	4483	4310	4595	5446

This increase is in part attributable to the drafting of large numbers of cows to Government Slaughterhouses under food control, and, in part, to the cessation of the English trade in fat cows—large consignments of which were despatched weekly from the City to the manufacturing districts of England, principally Yorkshire. There can be little doubt, however, that the main influence responsible for the larger number slaughtered has been the steady increase in the prices obtainable for fat cows. The slaughter of large numbers of young cows at the time when their capacity for milk production is at its best is economically most unsound. The effect has been felt in the milk supplies, and it is now reflected in the abnormally high prices demanded for newly calved cows.

The large number of calves slaughtered is evidence of another procedure of a most wasteful nature. During the year 5989 calves were slaughtered, as compared with 4371 in 1918. The explanation is to be found mainly in the deficiency in the supplies of mutton available. The demand which arose on the part of the butchers in order to provide customers with an alternative for beef forced up prices,

particularly after control on the sale of calves was removed. In turn, the high prices provided inducement to breeders to place on the market many calves which normally would have been retained in the feeding herds.

Tuberculosis is the disease of paramount importance in the work of meat inspection. It is of much more frequent occurrence in cows than in other classes of cattle. During the last three years the Slaughterhouse returns show a progressive increase in the incidence of the disease over all classes of cattle. In some measure this is due to the greater proportion which the number of cows bears to the total cattle slaughtered; but in a greater degree it is attributable to the consignment, under food control, of certain lower grades of cattle to the Government Slaughterhouses, where supervision and efficient inspection were exercised, and to the fact that many animals were drafted to the City for slaughter from areas which normally contribute little or nothing to the meat supplies. The increased incidence of the disease was not confined to cows; but, as will be seen by reference to the table showing the percentage occurrence of the disease, tuberculosis was found to be twice as prevalent in other cattle (excluding cows) as in the two preceding years. The inference which may fairly be drawn from the figures is that the incidence of tuberculosis is, relatively speaking, low amongst the herds in the areas from which the City normally draws its meat supplies. This view is supported by actual experience in the work of inspection, as well as by comparison with the Slaughterhouse statistics from other centres.

Constant supervision has been exercised over the meat and other foodstuffs imported into and exposed for sale in the City. A table is appended showing the frozen and home-killed meat imported into the City during the year. The port of Granton, through which normally considerable supplies of ham and bacon were imported, has contributed negligible quantities to the food supply of the City during the year.

On the whole, the consignments of home-killed and frozen beef and mutton imported into the City have been of fair average quality, but they have fallen short of standard consistently maintained in pre-war days. More room for criticism has arisen in respect of the condition in which some of the consignments have reached the City, and this has been especially the case in regard to frozen mutton. The standard has been distinctly below the average, and in certain instances it has been necessary to take action on this account. This has been a factor contributing to the large condemnation of meat in various premises in the City.

It is very satisfactory to be able to report, in respect of meat imported into the City from outside sources, that the necessity for taking action on account of disease arises comparatively rarely and only in consignments consisting of a single carcase. Depreciation and unfitness are too frequently dependent on faulty handling and packing in the case of single carcasses despatched from country centres. The influence of transport by rail is a factor contributing to depreciation, but the gross carelessness sometimes manifested in the dressing and packing of single carcasses is largely responsible for their arrival in an unsound and unusable condition.

Under the heading of fruit and vegetables condemned, the high figure shown is largely due to several consignments of dates amounting to over 27 tons which arrived in the City in a quite unsaleable condition—the result, apparently, of prolonged storage.



During the year regular supervision has been exercised over all premises where food is offered and prepared for sale, and from time to time seizures have been made of game, poultry, ham, bacon, butter, and other provisions.

**Inspection of Cowsheds and Dairy Cows.**—The number of licensed Cowsheds in the City during the year was 57, of which 7 were in private occupation. The average cow population was 1684. As compared with the previous year the number of licensed cowsheds was increased by 1 and the number of cows by 76.

The market for newly calved cows held weekly has been maintained under constant supervision. The majority of the cows offered for sale in the markets are purchased in the north of England and in Ireland. The dairy cows brought forward are invariably of a very good class and appropriate to the needs of the local dairymen. It is very rarely necessary to take exception to any of the animals offered for sale.

The whole of the dairy cows producing milk within the City have been inspected regularly at intervals of from three to four weeks. In addition, the country byres in close proximity to the City boundaries—from which milk is consigned to the City—have been visited as frequently as circumstances would permit. Sixteen cows were ordered to be removed from the dairy byres on account of tuberculosis. Eleven of these animals were affected with tuberculosis of the udder and five with advanced clinical tuberculosis. In the former tubercle bacilli were demonstrated in the milk and in the latter the bacilli were present in large numbers in the expectorate. In addition, under the provisions of the Edinburgh Municipal and Police (Amendment) Act, 1891, fifteen cows suffering from various diseases likely to make the milk injurious to consumers were removed from dairy byres supplying milk for sale in the City. Of the sixteen tubercular cows, nine are known to have been slaughtered, six passed into the hands of dealers, and the remaining animal could not be traced. Thirteen of the cows removed for other reasons were appropriately sold for grazing and two were slaughtered.

Reports were received in ten cases that samples of milk collected in the City, and derived from country sources, had been demonstrated by guinea pig inoculation to contain tubercle bacilli. Special inquiry was at once instituted in these cases and resulted in the discovery of the offending cow on five of the farms. On one farm the dairy stock had been sold and dispersed before receipt of the report, and in the remaining four no diseased animal was found. Test samples of milk taken on the farm at the time of inspection in three of the latter cases gave negative results to the guinea pig test, from which it is presumed that the affected cow had been disposed of amongst the animals sold between the time of collecting the sample and receipt of the report.

The Tuberculosis Order (1914) provided local authorities with the means of ensuring the slaughter of bovine animals affected with tuberculosis in a form or to an extent which constituted a material danger to the human race and to their fellows. It also provided for a reasonable measure of compensation to the owner for the loss sustained. It is unfortunate that this Order, suspended shortly after the outbreak of war, has not been reintroduced. Its influence for good was obvious during the period of its operation. Its reintroduction would remove the hardship and loss which, under existing conditions, fall on the dairyman, following the discovery in his herd of a cow with tuberculosis of the udder, and would again place local authorities in possession of the power to permanently remove these animals as a source of danger. Re-enforcement

of the Order might, with advantage, be urged. There does not appear to be very substantial grounds for delaying its reintroduction until the passage of the Milk and Dairies (Amendment) Bill, on which it is officially stated the delay is dependent.

Efforts have been made to overtake the arrears of repairs to dairy premises which had accumulated during the war years, and in a large measure this has been accomplished.

During the year, 196 samples of various discharges, secretions, etc., have been subjected to examination in the laboratory for the purposes of diagnosis. These include milk, expectorate, blood, skin scrapings, etc.

I am, my LORD and GENTLEMEN,

Yours truly,

A. GOFTON, F.R.C.V.S.,  
*Chief Veterinary Inspector.*

Table showing number of Animals slaughtered at Gorgie and Portobello Abattoirs during 1919.

					Gorgie.	Portobello.	Total.
Cattle	...	...	...	...	25,623	175	25,798
Calves	...	...	...	...	5,989	...	5,989
Sheep	...	...	...	...	84,595	545	85,140
Swine	...	...	...	...	7,075	607	7,682
Total					123,282	1,327	124,609

### Meat imported into the City.

Beef (Frozen)	...	...	...	...	equal to 9,098 carcasses
„ (Home Killed)	...	...	...	...	„ 600 „
Veal	...	...	...	...	„ 205 „
Sheep and Lambs (Frozen)	...	...	...	...	„ 20,444 „
„ „ (Home Killed)	...	...	...	...	„ 28,000 „
Pigs (Frozen)	...	...	...	...	„ 200 „
„ (Home Killed)	...	...	...	...	„ 330 „
Venison	...	...	...	...	„ 257 „
Boneless Beef	...	...	...	...	8000 packages or 200 tons

(The above figures are approximate only.)

Table showing number of Carcases in the different classes of Animals condemned at Abattoirs during 1919, and showing weights of condemned Carcases.

				Totally condemned.		Partially condemned.		Total Weight.
				No.	Weight in lb.	No.	Weight in lb.	
Cattle	...	...	...	259	112,854	502	65,720	178,574
Calves	...	...	...	16	679	...	...	679
Sheep	...	...	...	103	2,904	20	142½	3,046½
Swine	...	...	...	15	3,148	50	1,339½	4,487½
Total	...	...	...	393	119,585	572	67,202	186,787

Table showing causes of condemnation of Carcases in the different classes  
of Animals slaughtered at Abattoirs during 1919.

	CATTLE.		CALVES.		SHEEP.		SWINE.	
	Total.	Partial.	Total.	Partial.	Total.	Partial.	Total.	Partial.
Tuberculosis ... ..	226	429	1	...	...	...	10	45
Traumatism ... ..	5	45	3	...	15	12	1	4
Emaciation ... ..	3	3	...	...	36	3	...	...
Oedema ... ..	9	6	1	...	16	2	...	...
Abscesses ... ..	...	3	...	...	...	2	...	...
Peritonitis ... ..	1	...	3	...	2	...	...	...
Pneumonia and Pleurisy ... ..	1	...	...	...	...	...	...	1
Pericarditis ... ..	3	1	...	...	...	...	...	...
Fever ... ..	...	...	...	...	...	...	1	...
Septicæmia ... ..	2	...	1	...	...	...	1	...
Mastitis and Suppuration ... ..	3	6	...	...	1	...	...	...
Actinomycosis ... ..	...	2	...	...	...	...	...	...
Neoplasms ... ..	...	1	...	...	...	...	...	...
Fracture ... ..	1	4	...	...	...	...	...	...
Cellulitis ... ..	...	1	...	...	...	...	...	...
Fatty Necrosis ... ..	...	1	...	...	...	...	...	...
Decomposition ... ..	5	...	7	...	33	1	2	...
TOTAL ...	259	502	16	...	103	20	15	50

Table showing comparison between Tuberculosis and Non-Tubercular Diseases as causes  
of condemnation in Carcases of Animals slaughtered in Abattoirs during 1919.

		CATTLE.				Swine.	Sheep.	TOTAL.
		Cows.	Calves.	Other Cattle.	TOTAL.			
Tuberculosis	Total	198	1	28	227	10	...	237
	Partial	316	...	113	429	45	...	474
Total and Partial		514	1	141	656	55	...	711
Non-Tubercular Diseases	Total	23	15	10	48	5	103	156
	Partial	48	...	25	73	5	20	98
Total and Partial		71	15	35	121	10	123	254



Table showing Organs destroyed in the different classes of Animals  
at Abattoirs during 1919.

	CATTLE.						Swine.	Sheep.	Total.
	Oxen.	Bulls.	Cows.	Heifers.	Calves.	Total.			
LUNGS—									
Tuberculosis . . .	283	42	1517	52	1	1895	36	...	1931
Abscesses . . . .	36	5	30	2	1	74	1	22	97
Pneumonia . . .	7	...	10	...	...	17	6	5	28
Pleurisy . . . .	17	1	25	4	...	47	7	19	73
Parasitism . . . .	43	1	208	1	...	253	...	496	749
Neoplasms . . . .	1	...	...	...	...	1	...	5	6
Melanosis . . . .	1	1	1	...	...	3	...	...	3
HEARTS—									
Pericarditis . . .	13	...	28	1	...	42	6	2	50
„ Tubercular	...	...	4	...	...	4	...	...	4
Abscesses . . . .	5	...	5	...	...	10	1	3	14
BOWELS —									
Tuberculosis . . .	57	11	377	27	1	473	9	...	482
Oedema . . . .	3	...	7	...	...	10	...	2	12
Peritonitis . . .	1	1	...	...	...	2	3	...	5
Abscesses . . . .	3	...	3	...	...	6	...	...	6
STOMACHS—									
Tuberculosis . . .	44	12	275	16	1	348	10	...	358
Abscesses . . . .	31	...	15	...	...	46	...	5	51
Peritonitis . . .	2	1	2	...	...	5	1	...	6
Decomposition . .	5	...	1	...	...	6	...	33	39
Oedema . . . .	...	...	6	1	...	7	...	...	7
SPLEENS—									
Tuberculosis . . .	59	18	298	21	1	397	12	...	409
Abscesses . . . .	5	2	4	...	...	11	...	...	11
Peritonitis . . .	2	...	1	...	...	3	1	1	5
Dropsy . . . .	...	...	6	1	...	7	...	...	7
Cysts . . . .	...	...	1	...	...	1	...	...	1
Carry forward	618	95	2824	126	5	3668	93	593	4354

Table showing Organs destroyed during 1919—*continued*.

	CATTLE.						Swine.	Sheep.	Total.
	Oxen.	Bulls.	Cows.	Heifers.	Calves.	Total.			
Brought forward	618	95	2824	126	5	3668	93	593	4354
LIVERS—									
Tuberculosis . . .	112	19	369	32	1	533	25	...	558
Abscesses . . .	512	18	249	20	2	801	1	10	812
Dis. Necrosis . . .	3	1	4	...	...	8	...	1	9
Cirrhosis . . .	33	3	27	2	...	65	14	1	80
Cav. Angioma . . .	5	1	33	...	...	39	...	...	39
Echinococcus . . .	15	1	110	1	...	127	1	4	132
Distomatosis . . .	897	19	506	29	...	1451	...	188	1639
Dropsy . . .	...	...	6	...	...	6	...	1	7
Neoplasms . . .	...	...	1	...	...	1	...	...	1
Peritonitis . . .	1	...	1	...	...	2	2	2	6
Degeneration . . .	8	...	23	...	...	31	1	6	38
KIDNEYS—									
Tuberculosis . . .	5	...	19	1	...	25	1	...	26
Abscesses . . .	9	1	6	...	...	16	...	...	16
Cysts . . .	4	...	6	...	...	10	...	...	10
Nephritis . . .	1	4	9	...	3	17	...	...	17
Degeneration . . .	1	...	10	...	...	11	...	...	11
UDDERS—									
Tuberculosis . . .	...	...	43	1	...	44	4	...	48
Mastitis . . .	...	...	449	...	...	449	...	...	449
Abscesses . . .	...	...	33	...	...	33	...	...	33
Traumatism . . .	...	...	6	...	...	6	...	...	6
HEADS—									
Tuberculosis . . .	200	24	309	35	...	568	242	...	810
Actinomycosis . . .	35	3	9	1	...	48	...	...	48
Abscesses . . .	2	...	6	1	1	10	2	...	12
Traumatism . . .	1	...	4	1	...	6	1	3	10
Catarrh . . .	1	...	1	...	1	3	...	...	3
TONGUES—									
Abscesses . . .	2	...	2	...	...	4	...	...	4
FEET—									
Abscesses . . .	5	...	1	...	...	6	...	...	6
TOTAL . . .	2470	189	5066	250	13	7988	387	809	9184

Table showing percentage incidence of Tuberculosis in Animals slaughtered at Abattoirs during the years 1917, 1918, and 1919.

	1917.	1918.	1919.
Cows	21.17 per cent.	25.46 per cent.	35.99 per cent.
Other Cattle	1.28 „	1.47 „	2.95 „
Cattle (all classes)	5.47 „	7.12 „	9.98 „
Calves	0.06 „	0.07 „	0.02 „
Swine	1.06 „	2.27 „	3.72 „

Table showing number of visits paid to Shops, etc., during the year 1919.

Butchers' Shops	...	...	...	1476
Provision Shops	...	...	...	2033
Fishmongers' Shops	...	...	...	483
Fruiterers' Shops	...	...	...	1455
Meat Sales and Cold Stores	...	...	...	684
Live Stock Sales and Markets	...	...	...	170
Street Hawkers	...	...	...	28
Railway Stations	...	...	...	689
Hide and Skin Merchants	...	...	...	108
Wholesale Meat Shops	...	...	...	276
Wholesale Fruit Markets	...	...	...	50
Total	...	...	...	<u>7452</u>

Table showing numbers and weights of Foodstuffs seized in premises in the City.

	No.	Weight in lb.
Beef	96	29,889 $\frac{3}{4}$
Mutton	39	3,457 $\frac{1}{2}$
Pork	92	2,525
Veal	3	177
Poultry and Game	12	2,443
Edible Offal	25	1,630 $\frac{1}{2}$
Fruit and Vegetables	24	63,980
Provisions	37	3,243 $\frac{1}{2}$
Total	<u>328</u>	<u>107,346<math>\frac{1}{4}</math></u>

Summary showing total Foodstuffs condemned in the City during 1919.

	Weight in lb.
Meat	222,836 $\frac{1}{4}$
Poultry and Game	2,443
Edible Offal	1,630 $\frac{1}{2}$
Fruit and Vegetables	63,980
Provisions	3,243 $\frac{1}{2}$
Total	<u>294,133<math>\frac{1}{4}</math></u>
Tons	131
Cwts.	6
Lb.	<u>21<math>\frac{1}{4}</math></u>

Summary of work under Dairies, Cowsheds, and Milkshops Orders and the  
Edinburgh Municipal and Police (Amendment) Act, 1891.

No. of licensed dairy byres	...	...	...	...	...	57
Average cow population	...	...	...	...	...	1684
No. of visits to City byres	...	...	...	...	...	1033
No. of visits to Country byres	...	...	...	...	...	234
No. of Country cows inspected	...	...	...	...	...	5307
No. of newly calved cows inspected in Gorgie Markets	...	...	...	...	...	5262
No. of cows removed from dairy herds under Edinburgh Municipal and Police (Amendment) Act, 1891 :—						
Tuberculosis of udder	...	...	...	...	11	
Advanced clinical tuberculousis	...	...	...	...	5	
Other causes	...	...	...	...	15	
					<hr/>	31
Bacterial and other examinations of :—						
Milk	...	...	...	...	125	
Expectorate	...	...	...	...	10	
Blood	...	...	...	...	36	
Skin scrapings for mange parasites	...	...	...	...	25	
					<hr/>	196
Notices served requiring :—						
Lime-washing of premises	...	...	...	...	127	
Removal of manure	...	...	...	...	20	
Removal of diseased cows	...	...	...	...	31	
Carrying out repairs	...	...	...	...	14	
					<hr/>	192





